



September 2005

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Editorial

Job Register Fee Change

The AAS Job Register has always had a 250 word limit per job announcement. This limit encourages the brief and informative description of jobs and greatly aids job seekers by limiting announcements to a reasonable length. In the past, we worked with institutions to edit their announcements to meet this limit, but this was always an inconvenience for both the AAS and the publishing institution.

Announcements beyond the 250 word limit can now appear, but will incur a \$0.25 per word surcharge. It is understood that some announcements must be longer than 250 words and this fee was set low so as not to incur an undue financial penalty on these lengthy announcements.

The Job Register announcement base rate remains at a very low rate compared to comparable services provided by other professional societies. The AAS will continue to strive to maintain a low rate for the announcement of employment opportunities, which we feel is of significant benefit to the astronomical community and continues to secure the AAS Job Register's position as the number one source for astronomical employment opportunities.

Kevin B. Marvel
Deputy Executive Officer

Publication Policy for the AAS Job Register

Deadlines for submission

Job announcements may be submitted at any time and should be submitted well before the deadline so that any errors or difficulties can be resolved efficiently.

Job announcements must be received and paid for by the 15th of each month for publication in the subsequent issue of the *Job Register*.

If payment is not received, then the announcement will not run in the next month's issue, but in the subsequent month's issue. We recommend that submission and payment be made well in advance of the monthly deadline.

Examples

Submit and pay by 15 October - Announcement will appear in the November *Job Register*

Submit and pay by 19 October - Announcement will appear in the December *Job Register*

Submit by 15 October, but pay after that date but before December 1- Announcement will appear in the December *Job Register*.

Rate Sheet

For rate information please see the [job register submission form](#).

Employers must indicate how they will pay for their announcement at the time of submission.

We accept payment by:

Check, in US currency drawn on a US bank. VISA and MasterCard be sure to include expiration date.

Checks should be made payable to American Astronomical Society and sent to:

American Astronomical Society
Attention Job Register Payment
2000 Florida Ave., NW,
Suite 400
Washington, DC 20009-1231, USA
FAX: 202-234-2560

The AAS is a small, scientific, non-profit organization.

The AAS Federal Identification number is 21-0735173.

In **very rare** circumstances a discount may be available for institutions from developing countries. In all cases, a formal petition for a reduced fee must be sent by email or FAX to the Deputy Executive Officer, [Dr. Kevin B. Marvel](#) requesting a discount and justifying the request.

In no case will the discount exceed a 50% reduction in the publishing fee or will discounts be available for more than one announcement per year.

Announcement Requirements

The word count limit per listing is 250 words. For longer ads, a \$0.25 per word charge will be applied.

Jobs will not be published without the following:

- (1) Indication that the vacancy is *bona fide* and that the position has not been promised to anyone;
- (2) for first time publication, an application closing date that falls no earlier than the last day of the month of publication; and
- (3) a check or appropriate billing information as described above.

We encourage advertisers to provide URLs to relevant web sites with their job announcements or additional information (e.g. department homepage).

We also STRONGLY encourage employers to include in the postings information about benefits offered or to link to this information. This is especially important to clarify for post-doctoral or other non-permanent positions. We also encourage applicants to inquire and obtain a clear picture of the benefits at the time any offer is proffered.

Previously published jobs may be re-published in the current issue with an application closing date earlier than the last day of the current month.

The decision to run an ad without 30 days response time is left to the originators.

The *AAS Job Register* cannot require overseas employers to comply with any U.S. regulations regarding employment discrimination.

Submission

All jobs should be submitted using the [Web Submission Form](#) or, if necessary, send your advertisement by electronic mail to jobs@aaas.org. If electronic mail is not available, job announcements, with payment are also accepted by US mail, and by FAX at 202-234-2560.

Frequency and Circulation

The *Job Register* is published monthly. On the average, 60 new jobs are announced in each issue. Since the *Job Register* is freely available to anyone with Internet access, circulation numbers are hard to estimate. In February 2001, over 6,000 unique IP addresses accessed the *Job Register*.

[Job Register statistics](#) are published on the Career webpages and in the Annual Report of the Society in the *Bulletin of the American Astronomical Society*.

The *Job Register* is published on the Web at: <http://members.aas.org/JobReg/Jobregister.cfm>.

Member Notification

The AAS maintains a list of members that like to be notified when a New Job Register is posted. Members may be added to the *Job Register* email notice list by sending a message to address@aaas.org.

Jobs from Previous Months

(Note: Some jobs reposted from prior months may have closing dates during the current month. Readers should pay careful attention to the posted closing dates.)

No. 21738

**Postdoctoral and Senior Research Awards in the Space and Planetary Sciences
NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES**

Tel:

**URL1: <http://www.national-academies.org/rap>
(information and online applications)**

Attention: Jane Dell'Amore

National Research Council Research Associateship Programs:

Postdoctoral Research Awards, Senior Research Awards

The National Research Council of the National Academies is accepting applications for awards for independent scientific research at the postdoctoral level and beyond for research to be conducted in residence at US Government laboratories. Awards will be offered in most areas of the space and planetary sciences, including astronomy, planetology, astrophysics, solar research, cosmology and related disciplines.

Among participating laboratories are:

Air Force Research Laboratory Naval Research Laboratory National Institute of Standards and Technology National Oceanic and Atmospheric Administration National Aeronautics and Space Administration

Awardees design their own research projects to be compatible with the interests of the sponsoring laboratory. Stipends for recent Ph.D. recipients at above listed laboratories range from \$50,000 to \$60,000 and are higher for additional experience. Awards also include support for relocation, professional travel and health insurance.

Annual application deadlines are February 1, May 1, August 1, and November 1. Detailed program information, including instructions on how to apply, can be found at: www.national-academies.org/rap. Only online applications will be accepted.

Questions should be directed to the NRC at tel: 202-334-2760 e-mail: rap@nas.edu

No. 21813

Radio Astronomer

NAVAL RESEARCH LABORATORY

4555 Overlook Ave., SW

Building 2/Room 277

Washington, DC 20375

USA

Tel: 202-767-0668

FAX: 202-404-8894

Email Submission Address: namir.kassim@nrl.navy.mil

Email Inquiries: namir.kassim@nrl.navy.mil

Attention: *Dr. Namir Kassim, Research Physicist*

The Remote Sensing Division of the Naval Research Laboratory (NRL) is seeking postdoctoral applications from those with experience in radio astronomy. The successful candidate will be expected to carry out innovative research programs using existing or planned low-frequency radio observations (e.g., with VLA, VLBA, Arecibo, GMRT, GBT). We seek candidates who would like to join an existing collaboration between NRL and Sweet Briar College to monitor for transient radio emission (e.g., the bursting transient GCRT J1745-3009) from Galactic and extragalactic sources.

NRL radio astronomers carry out a wide range of observational programs at the VLA, VLBA, and Arecibo Observatory, with a primary focus on the 74 and 330 MHz VLA and 330 MHz VLBA systems. The NRL-NRAO 74 MHz VLA system, with its 35 km baselines, is the highest angular resolution, highest sensitivity, low-frequency radio interferometer in operation today. With it, NRL scientists are beginning a sky survey of the northern hemisphere, the VLA Low-Frequency Sky Survey (VLSS). Inspired by the capabilities of the 74 MHz system, the Remote Sensing Division is overseeing the construction of the first elements in the Long Wavelength Array (LWA). When finished the LWA will provide wide-field imaging capabilities in the frequency range 20--80 MHz. The successful candidate will be expected to/have the opportunity to utilize these first elements for a variety of observations, including novel searches for radio transients.

Observational programs, such as a 74 MHz sky survey or ongoing 74 and 330 MHz Galactic center observations, including the transient monitoring program, are pursued both for their intrinsic astronomical interest as well as to help guide LWA calibration and imaging strategy and array configuration design. LWA will open a new window on the spectrum, with scientific applications in virtually all areas of astrophysics.

The opportunity exists for the successful candidate to involve Sweet Briar College (SBC) students in his or her research, and to present a series of guest lectures during SBC astronomy courses. SBC is a liberal arts college for women located near the Blue Ridge Mountains in central Virginia, less than hour from UVA and NRAO-Charlottesville, 3 hours from NRAO-Green Bank, and 3 hours from NRL in Washington DC.

Postdoctoral applications should be pursued through the National Research Council (NRC). NRL-NRC Associateships are awarded to persons who have held their doctorate for less than five years at the time the award is offered. Awards are for two years, with a third year extension for satisfactory accomplishments in the second year. Applicants will need to submit an original research proposal to be approved by the NRL-NRC advisor for subsequent evaluation by an external review panel chosen by the NRC. Deadlines for submission to the NRC are 1 August 2005, 1 February 2006, and 1 May 2006. The current award stipend is \$60,120.00 per year. US citizenship or legal permanent residency is required. Online applications can be submitted at <http://www.national-academies.org/rap>. For further information contact Dr. Namir Kassim at the above address. EOE/AEE.

No. 21820
Assistant Professor (Tenure-Track) of Astronomy

FRANKLIN AND MARSHALL COLLEGE
Department of Physics and Astronomy
PO Box 3003
Lancaster, PA 17604
USA
Tel: 717 391 3809
FAX: 717 358 4474
URL1: <http://www.fandm.edu/physics.xml>
(Physics and Astronomy page)
URL2: <http://www.fandm.edu/astronomy.xml>
(Astronomy page)
Email Inquiries: gadkins@fandm.edu

Attention: Greg Adkins, Professor of Physics and Chair

Applications are invited for a tenure-track position in astronomy starting in fall 2006 at the rank of assistant professor in the Department of Physics & Astronomy, Franklin & Marshall College.

Candidates must demonstrate substantial commitment to undergraduate teaching, with prior experience designing and teaching undergraduate astronomy and astrophysics courses preferred. A vigorous research program is also required which can involve undergraduate students in publishable research projects. Available facilities include access to the NURO (Flagstaff) 0.8-m telescope with CCD camera, a 0.4-m telescope with CCD camera plus 11-inch Clark refractor sited near campus, and six 8-inch Celestron telescopes with CCDs and indoor PC control on the top-floor balcony of the science building. Recent projects have included work at the Cerro Tololo Inter-American Observatory, the Arecibo Observatory, and the Keck Observatory. See <http://www.fandm.edu/astronomy.xml> for further details.

A Ph.D. in astronomy or astrophysics is required. A complete application package must include a statement of teaching philosophy and research interests, a description of possible undergraduate research projects, curriculum vitae, and copies of graduate and undergraduate transcripts. Letters of recommendation (at least three) should be sent directly to the address above. Review of completed applications will begin on October 1.

Franklin and Marshall is a selective private liberal arts college with 1,850 students located in Lancaster, Pennsylvania, a small city of 50,000 about 1-1/2 hours from Baltimore and Philadelphia. The college is committed to cultural pluralism through the hiring of women and minorities and encourages all interested individuals to apply. EOE/AA.

No. 21823
NSF Astronomy and Astrophysics Postdoctoral Fellowships (AAPF) at Tufts University-
DEPARTMENT OF PHYSICS AND ASTRONOMY, TUFTS UNIVERSITY
TUFTS UNIVERSITY
Robinson Hall
Tufts University
Medford, MA 02155
USA
Tel: (617) 627-3655
FAX: (617) 627-3878

URL1: <http://www.aoc.nrao.edu/NSFfellows/>
(NSF's AAPF program)
URL2: <http://ase.tufts.edu/physics/faculty.htm>
(Faculty in Tufts Physics/Astronomy Dept.)
URL3: <http://ase.tufts.edu/education/programs/main.asp>
(Programs in Tufts Education Dept.)
Email Inquiries: william.waller@tufts.edu

Attention: William Waller, Research Associate Professor

NSF Astronomy and Astrophysics Postdoctoral Fellowships (AAPF) at Tufts University

The Department of Physics and Astronomy at Tufts University invites candidates for the NSF Astronomy Astrophysics Postdoctoral Fellowships (AAPF) program to consider joining our small but dynamic group of faculty in Astronomy research and education. The NSF AAPF program is designed for postdoctoral candidates interested in carrying out an integrated program of research and education. The fellowship program supports researcher-educators for a period of up to 3 years. The next deadline for proposals is October 12, 2005. The NSF AAPF program does not have any special relationship with Tufts University. All proposals should be directed to the NSF.

Tufts University is a small "Research 1" university in the Boston area that is known for its international outlook and commitment to education. The Department of Physics and Astronomy has faculty engaged in solar, stellar, galactic, extragalactic, and cosmological research. Several of the faculty are leading efforts in astronomy education and public outreach, including collaborative programs with the Tufts Department of Education and with other institutions in the Boston area. Interested NSF AAPF candidates are encouraged to contact Dr. William H. Waller by e-mail at (william.waller@tufts.edu).

No. 21827
Postdoctoral Position in High Energy Astrophysics
UNIVERSITY OF IOWA
214 Van Allen Hall
Iowa City, IA 52242
USA
Tel: 319-335-1690
FAX: 319-335-1753
URL1: <http://www.physics.uiowa.edu/>
Email Submission Address: christine-stevens@uiowa.edu

Attention: Christine Stevens, Dept. of Physics and Astronomy

Postdoctoral Position in High Energy Astrophysics University of Iowa

The University of Iowa has an immediate opening for a postdoctoral research scientist to work in high-energy astrophysics in collaboration with Prof. Philip Kaaret. The successful applicant will work on the gamma-ray observatory VERITAS, including writing off-line data analysis software, and will analyze data from X-ray observatories. Candidates must hold a Ph.D. in

physics or astronomy and have experience in gamma-ray or X-ray astronomy. Extensive travel to the VERTIAS site in Arizona will be required. The appointment will be for one year initially, subject to the availability of funding, and may be renewed for additional years dependent on performance and continued funding.

Applicants should submit a curriculum vitae, a list of publications, and a statement of research interests. Applicants should also make arrangements for three letters of recommendation to be sent directly. Electronic submission in pdf or plain text format are acceptable. Letters of recommendation can be sent via e-mail. Review of applications will begin on September 5th and continue until the position is filled. The University of Iowa is an equal opportunity employer. Women and members of minority groups are strongly encouraged to apply.

No. 21828

Radio Astronomy Department Head

NATIONAL ASTRONOMY & IONOSPHERE CENTER/ARECIBO OBSERVATORY

CORNELL UNIVERSITY

502 Space Sciences Bldg.

Ithaca, NY 14853-6801

USA

Tel: 607-255-3735

FAX: 607-255-8803

URL1: <http://www.naic.edu>

Email Submission Address: jtm14@cornell.edu

Email Inquiries: jtm14@cornell.edu

Attention: Dr. Robert L. Brown, Director

The National Astronomy and Ionosphere Center (NAIC) is seeking exceptionally well-qualified applicants for the position of Radio Astronomy Department Head at the Arecibo Observatory in Arecibo, Puerto Rico. Applicants with extensive research experience in any field of astronomy that can be effectively pursued with the Arecibo telescope will be considered. This is an appropriate position for a mid-career person to develop further his/her leadership skills and to develop experience in the management of scientific research.

The Radio Astronomy Department at the Arecibo Observatory includes a staff of 15 researchers, postdocs and long-term visiting scientists. At the Arecibo Observatory, the NAIC staff scientists work in a team environment to advise visiting scientists on all aspects of their observing programs, and to implement improvements to the Observatory instruments, observing techniques and signal processing facilities. Working with the staff and the user community, the department head formulates the scientific vision for development of the Observatory astronomy program, engages the scientific community in establishing priorities for new ventures, and seeks to realize that vision by forging partnerships with academic researchers. The department head participates actively in U.S. and international scientific meetings and topical symposia promoting the scientific opportunities and achievements of the Arecibo Observatory.

The Department Head is expected to maintain a strong program of personal discretionary research; he/she is encouraged to spend 50% of the time on this endeavor. All NAIC scientific staff members have competitive access to the 305-m diameter Arecibo telescope, its suite of

receivers spanning the frequency range from 300 MHz to 10 GHz, and its backend signal processors capable of analyzing bandwidths up to 800 MHz. A Mark 5 VLBI system is used for ultra-wideband interferometric observations with other large telescopes in the US and Europe. The newly-operational, multibeam system, the Arecibo L-Band Feed Array (ALFA), and the community-based legacy surveys it supports, provides a wealth of unique opportunities for collaborative scientific engagement with the more than 100 students and scientists who are conducting ALFA survey observations at Arecibo. The Radio Astronomy Department Head is an employee of Cornell University, the institution that manages NAIC on behalf of the National Science Foundation. As such, he/she will be paid a salary competitive with other prestigious research universities, one that adequately recognizes the responsibilities of the position. The individual will fully participate in the Cornell benefits program. For a suitably qualified individual, an appointment as an adjunct faculty member of the Cornell astronomy department may be appropriate. Collaborative interaction with U.S. academic researchers is an important part of the job and for this reason a generous travel allowance is provided.

A Ph.D in astronomy or a related field, together with at least 7 years research experience in astronomy and a substantial record of published research achievements, is required. Please send a complete curriculum vita including academic, professional and personal data, a research plan and three letters of reference to: Director, National Astronomy and Ionosphere Center, 502 Space Sciences, Cornell University, Ithaca, NY 14853-6801. EOE/AE. The deadline for receipt of applications and all supporting materials is September 30, 2005. For further information about the NAIC Arecibo Observatory see <http://www.naic.edu>.

No. 21848

Jansky Fellowships 2006

NATIONAL RADIO ASTRONOMY OBSERVATORY

520 Edgemont Road

Charlottesville, Virginia 22903

USA

Tel:

Attention: Director's Office

The National Radio Astronomy Observatory (NRAO) announces the 2006 postdoctoral Jansky Fellowship program that provides outstanding opportunities for research in astronomy. The Jansky Fellows formulate and carry out investigations either independently or in collaboration with others within the wide framework of interests of the Observatory. Prior radio experience is not required and multi-wavelength projects leading to a synergy with NRAO instruments are encouraged. The NRAO also encourages applications from candidates with interest in radio astronomy instrumentation, computation, and theory.

The starting salary will be \$49,000 per year with an appointment duration of two years that may be renewed for a third year. There is a research budget of \$7,000 per year for travel and computing requirements. In addition, page charge support, as well as vacation accrual, health insurance, and a moving allowance are provided.

Up to three appointments will be made annually for positions at any of the NRAO sites (Socorro, NM; Green Bank, WV; and Charlottesville, VA). The Jansky Fellows are encouraged to spend time at universities working with collaborators during the course of their fellowship. In

addition, up to three Jansky Fellow appointments will be made annually for positions that may be located at a US university or research institute. Frequent and/or long term visits to the NRAO sites are encouraged.

The NRAO web site at http://www.nrao.edu/administration/directors_office/jansky-postdocs.shtml provides a description of the application process and other relevant details. The candidates must receive their PhD prior to beginning the appointment.

The deadline for applications and letters of recommendation is November 15, 2005. The NRAO is an equal opportunity employer (M/F/H/V).

No. 21850
Radio Astronomer
NAVAL RESEARCH LABORATORY
4555 Overlook Ave., SW
Building 2/Room 277
Washington, DC 20375
USA
Tel: 202-767-0668
FAX: 202-404-8894
Email Submission Address: namir.kassim@nrl.navy.mil
Email Inquiries: namir.kassim@nrl.navy.mil

Attention: Dr. Namir Kassim, Research Physicist

The Naval Research Laboratory (NRL) is seeking postdoctoral applications from candidates with an interest in developing data reduction algorithms required by an emerging suite of ambitious radio telescopes, including the Long Wavelength Array (LWA) and the Extended Very Large Array (EVLA). Successful candidates are normally resident at NRL in Washington, DC, but the option exists for residency in either Albuquerque or Socorro, NM, proximate to the National Radio Astronomy Observatory's (NRAO's) Array Operations Center in Socorro. In all cases, the successful candidate will be expected to work closely with scientists developing computational solutions to challenges facing the new radio instruments.

NRL is part of the Southwest Consortium (SWC), a University-based consortium led by the University of New Mexico (UNM). The four institutions currently participating as full members of the Southwest Consortium (SWC) are: UNM; the University of Texas at Austin through its Applied Research Laboratories (UT-ARL); the Los Alamos National Laboratory (LANL) of the Department of Energy; and NRL of the Department of Defense.

The SWC is developing the Long Wavelength Array (<http://lwa.nrl.navy.mil>) that will explore the relatively neglected frequency regime below 80 MHz, by capitalizing on breakthrough ionospheric calibration techniques that finally permit development of very low frequency arrays larger than ~5 km. The ~400 km LWA will realize improvements in both angular resolution and sensitivity by at least 2-3 orders of magnitude. The LWA frequency range favors studies of non-thermal and coherent (both known and unknown) emission sources, unique absorption processes, and provides an intrinsic link to shock physics, high-energy phenomena, and the high-red-shift Universe.

NRL astronomers carry out a wide range of observational programs at the VLA, VLBA, GMRT, GBT, and Arecibo Observatory, with a primary focus on the 74 and 330 MHz VLA and 330 MHz VLBA systems. The NRL-NRAO 74 MHz VLA system, with its 35 km baselines, is the highest angular resolution, highest sensitivity, low-frequency radio interferometer in operation today, and constitutes Phase 0 of the LWA. Observational programs, such as the ongoing Very Low Frequency Sky Survey (<http://lwa.nrl.navy.mil/VLSS/>) and ongoing 74 and 330 MHz Galactic center observing programs (<http://rsd-www.nrl.navy.mil/7213/lazio/GC/>) are pursued both for their science and also to address challenges for future low-frequency interferometers. Since the best way to solve technical problems is with real data, the successful candidate will be encouraged to pursue astronomical research using real low frequency data, while at the same time developing the innovative algorithms to maximize the scientific value of the data.

Postdoctoral applications should be pursued through the National Research Council (NRC). NRL-NRC Associateships are awarded to persons who have held their doctorate for less than five years at the time the award is offered. Awards are for one year, with a second year extension for satisfactory accomplishments in the first year. Applicants will need to submit an original research proposal to be approved by the NRL-NRC advisor for subsequent evaluation by an external review panel chosen by the NRC. Deadlines for submission to the NRC are 15 August 2005, 15 November 2005, and 15 February 2006. The current award stipend is \$60,120.00 per year. US citizenship is required. Application materials can be obtained by writing to the Associateship Programs Office, TJ 2114, National Research Council, 2101 Constitution Ave. NW, Washington DC 20418 (email: rap@nas.edu or <http://www.nas.edu/rap/>). For further information contact Dr. Namir Kassim at the above address. EOE/AEE.

No. 21852**Tenure-Track Faculty Position in Astrophysics****DEPARTMENT OF ASTROPHYSICS, IMAPP****Toernooiveld 1****The Netherlands****Tel: +31-24-3652265****FAX: +31-24-3652424****URL1: <http://www.astro.ru.nl>****(*Dep. of Astrophysics Home Page*)****Email Submission Address: pz@science.ru.nl****Email Inquiries: kuijpers@astro.ru.nl*****Attention: Mrs. M.A. van Hout, Personnel Affairs***

The Department of Astrophysics of the Radboud University Nijmegen invites applications for a tenure-track faculty position in the field of Astrophysics. Astrophysics is part of the Institute of Mathematics, Astrophysics and Particle Physics (IMAPP) of the Faculty of Science.

The Faculty offers a full curriculum in Physics and Astronomy. Current research interests are in theoretical and interpretational high-energy astrophysics with emphasis on astroparticle physics and on compact objects. Current facilities available through national partnership include the telescopes at La Palma (UK/NL) and ESO, the Westerbork Synthesis Radio Telescope, and LOFAR which is presently under construction and which will focus on astroparticle physics as one of its four key programmes. Nijmegen participates in the

Netherlands' Research School for Astronomy (NOVA).

The appointment will be made at the assistant professor level. Candidates should have a proven record of outstanding research in astrophysics in one of the above fields, with a focus on the development and/or usage of planned international telescopes. A keen interest in teaching astronomy and physics is requested, in particular in the area of astronomical instrumentation.

Further information concerning this position can be obtained from Prof. Dr. J. Kuijpers (kuijpers@astro.ru.nl ; tel. +31-24-3652080; fax +31-24-3652807) or Dr. P. Groot (pgroot@astro.ru.nl ; tel +31-24-3652801).

Interested applicants should submit Curriculum Vitae, publication list, a description of research interests, and have three letters of recommendation sent to the Radboud University, Faculty of Science, Personnel Affairs, Toernooiveld 1, 6525 ED Nijmegen, The Netherlands, by September 17, 2005. Consideration of applications will begin September 17, 2005 and will continue until the position is filled. Applications should quote the reference number 62.48.05.

No. 21855

Director, Gemini Observatory

GEMINI OBSERVATORY

1200 New York Avenue NW

Suite 350

Washington, DC 20005

USA

Tel: 202-483-2101

FAX: 202-483-2106

URL1: <http://www.aura-astronomy.org>

Email Submission Address: mme@aura-astronomy.org

Email Inquiries: mclaren@ifa.hawaii.edu

Attention: Robert McLaren, Chair, Gemini Director Search Committee

The Association of Universities for Research in Astronomy (AURA) seeks a new Director for the Gemini Observatory, with the aim of filling this position in early 2006. The Gemini Observatory is an international partnership to operate twin 8.1-meter telescopes, one on Mauna Kea in Hawaii, and the other on Cerro Pachón in Chile. The partners include the United States, United Kingdom, Canada, Chile, Argentina, Australia, and Brazil. AURA manages the Gemini Observatory under the auspices of the International Gemini Board and the U.S. National Science Foundation (NSF) as its executive agency. Gemini currently has a staff of approximately 160, including scientists, engineers, technicians and administrative personnel.

The Gemini Director is responsible to the Gemini Board, through the Executive Agency and AURA, for the overall operation of the Observatory. The Director interacts directly with representatives of the Executive Agency and the partner countries. The Director leads a scientific, technical, and administrative staff to carry out the mission of the Observatory and to conduct Gemini- related research.

Candidates for Director should have demonstrated strong scientific leadership and have an

established record of research achievement, preferably in astronomy or a closely related field. Candidates should also have demonstrated talent for administration and management, combined with skill in institutional and international relations.

Applications will be accepted until the position is filled. All applications received by September 30, 2005 will be given full consideration. Applications must include: a curriculum vitae, information on relevant experience and accomplishments, the candidate's vision for the evolution of the Gemini Observatory, and the names of three professional references. Please send applications to:

Gemini Director Search Committee, c/o AURA, Suite 350, 1200 New York Avenue NW, Washington, DC 20005

The Search Committee will hold all applications in confidence.

Women and minorities are encouraged to apply. AURA is an EOE/AA/F/D/V employer

Questions related to this search should be directed to Dr. Robert McLaren, Chair of the Gemini Director Search Committee at mclaren@ifa.hawaii.edu

Information and updates regarding this search are available on www.aura-astronomy.org

No. 21860

Postdoctoral Fellowship in Theoretical Astrophysics / Plasma Astrophysics

UNIVERSITY OF ROCHESTER

Department of Physics and Astronomy

University of Rochester

Rochester, NY 14627

USA

Tel: 1-585-275-0537

FAX: 1-585-273-2813

URL1: <http://www.pas.rochester.edu>

(UR Physics & Astronomy Home Page)

Email Submission Address: blackman@pas.rochester.edu

Attention: Eric Blackman, Professor

The theoretical astrophysics group at the University of Rochester invites applications for a postdoctoral position in theoretical astrophysics or plasma physics and the overlap between the two fields. Preference will be given to candidates with expertise in high energy astrophysics, relativistic plasma astrophysics, or computational plasma physics with PIC, Vlasov, or MHD codes. Example areas of research include particle acceleration in high energy sources, magnetic reconnection, jets, accretion disks and coronae, plasma and MHD turbulence, and the amplification and dynamics of magnetic fields. The excellence of the candidate is more important than the specific focus of previous research.

The position is for 2 years with the possibility of extension for a third year. The candidate can expect significant independence as well as the opportunity for close collaboration with an active group in a supportive and interactive working environment. In addition to the activity in

the Department of Physics and Astronomy, the University is home to the Laboratory for Laser Energetics, a major plasma physics research center in the US.

Applicants should submit a CV, a description of research interests, and have three letters of recommendation sent. Consideration of applications will be ongoing until the position is filled. The University of Rochester is an equal opportunity employer.

No. 21862

Program Manager, Astronomical Facilities & Large Projects

NATIONAL SCIENCE FOUNDATION

4201 Wilson Blvd.

Arlington, VA 22230

USA

Tel: 703-292-4895

FAX: 703-292-9034

URL1: http://www.nsf.gov/publications/vacancy.jsp?org=AST&nsf_org=AST

Email Submission Address: efriel@nsf.gov

Email Inquiries: efriel@nsf.gov

Attention: Eileen Friel, Executive Officer, AST

DIVISION OF ASTRONOMICAL SCIENCES National Science Foundation, Arlington, VA

NSF's Division of Astronomical Sciences is seeking qualified applicants for the position of Program Manager, Astronomical Facilities. The Program Manager will have primary responsibility for the oversight and management of one or more major astronomical observational facilities and/or large projects supported by the Division. Responsibilities involve planning and budgeting for the facility; reviewing and approving program plans, budgets, contracts, etc; monitoring the performance of the managing organization; and serving as the principal contact for administrative and programmatic matters concerning the facilities or projects. Activities also include planning, budget development, the preparation of written material about the research supported by the Division, and interactions with other NSF programs, Federal agencies and organizations. Final programmatic and management responsibility will depend on the expertise and qualifications of the candidate. Program directors are expected to bring their scientific expertise to the activities of the Division, and to serve as a liaison between the astronomical community and NSF, disseminating information about NSF and Division activities and opportunities. Incumbents are expected to work with the astronomical research and education community to broaden the diversity of participants in NSF programs. Program Directors are encouraged to participate in ongoing long-range and strategic planning and program development within the Astronomy Division. There are opportunities to participate in Foundation or Directorate-wide activities in areas of education, facilities management, strategic planning and program development.

The position will be filled on either a permanent basis or as a rotator appointment to commence in late 2005. The salary range, which includes locality pay adjustment, is from \$88,369 to \$137,713 per annum. Applicants must have a Ph.D. or equivalent experience in astronomy, astrophysics, or a closely related field, plus six or more years of successful research, research administration, and/or managerial experience beyond the Ph.D.

Announcement E20050102A and E20050121-Rotator, with position requirements and application procedures, is located on the NSF Home Page at <http://www.nsf.gov/jobs>. Applicants should submit a resume or application of your choice, up to three letters of recommendation, and a narrative statement that addresses your background and/or experience related to the position to the address above by October 1, 2005. Applicants should refer to vacancy announcement number E20050102A for the Permanent position and E20050121 for the Rotator position. Telephone inquiries may be referred to Lisa Codario at 703-292-4351. For technical information, contact Dr. Eileen D. Friel, AST Executive Officer, 703-292-4895. (Hearing impaired individuals may call TDD 703-292-8044).

NSF is an Equal Opportunity Employer. The National Science Foundation provides reasonable accommodations to applicants with disabilities on a case-by-case basis. If you need a reasonable accommodation for any part of the application and hiring process, please notify the point of contact listed on this vacancy announcement.

No. 21866
Hubble Fellow
SPACE TELESCOPE SCIENCE INSTITUTE
3700 San Martin Drive
Baltimore, MD 21218
USA
Tel:
URL1: <http://www.stsci.edu>
Email Inquiries: fall@stsci.edu

Attention: Michael Fall

The Space Telescope Science Institute announces the continuation of the Hubble Fellowship Program and solicits applications for fellowships to begin in the fall of 2006. This program supports outstanding postdoctoral scientists whose research is broadly related to the scientific mission of the Hubble Space Telescope. The research may be theoretical, observational, or instrumental. This program is open to applicants of any nationality who have earned (or will have earned) their doctoral degrees on or after January 1, 2003, in astronomy, physics, or related disciplines. The fellowships are tenable at U.S. host institutions of the fellows' choice, subject to a maximum of one new fellow per host institution per year. The duration of the fellowship is up to three years: an initial one-year appointment and two annual renewals contingent on satisfactory performance and availability of NASA funds.

The Announcement of Opportunity, which includes detailed program policies and application instructions is available at the STScl website, <http://www.stsci.edu/institute>. Applicants must follow the instructions given in this Announcement. Inquiries about the Hubble Fellowships may be directed to Dr. Michael Fall (410-338- 4833, fall@stsci.edu).

The deadline for both applications and letters of reference is Friday, October 14, 2005. Offers will be made before February 1, 2006, and new appointments are expected to begin on or about September 1, 2006. Women and members of minorities are strongly encouraged to apply. EOE/AA/M/F/D/V.

No. 21875

Research Astronomers
U.S. NAVAL OBSERVATORY FLAGSTAFF STATION
10391 W. Naval Observatory Road
Flagstaff, AZ 86001-8521
USA
Tel: 928-779-5132
FAX: 928-774-3626
Email Submission Address: jrp@nofs.navy.mil

Attention: Dr. Jeff Pier, Director

The US Naval Observatory Flagstaff Station anticipates an immediate opening for two astronomers. The primary responsibility for one of these positions is to continue and complete the commissioning of the Station's newest optical telescope: a 1.3-m wide-field RC instrumented with a six-CCD array of 2Kx4K e2v detectors covering 1.3 square degrees. The telescope and camera will be used primarily for wide-field astrometry, photometry, and transmission grating spectroscopy. The person hired will coordinate with the Station's engineering group and staff astronomers to bring the telescope up to full, routine, automated operation. Experience with telescopes and instrumentation is essential. Experience with automated pipeline data processing and archiving would be viewed very favorably. Knowledge of hardware-software interfaces would be helpful as would software programming capabilities (especially in C; knowledge of Fortran would also be beneficial). The scientist can expect to have 25% of his/her time available for supported personal research, and will have significant say in the scientific programs to be undertaken with the 1.3-m telescope.

The second position is for an infrared astronomer to assist with USNO's infrared astrometric and photometric programs, led by Dr. Fred Vrba. USNO currently uses an imaging camera with a 1024x1024 "ALADDIN" InSb array operating between 0.9 and 3.4 microns at the 61-inch telescope in automated observing mode. The primary use for this instrument is in USNO's infrared astrometric program of measuring proper motions, parallaxes, and perturbations for very low-mass stars and brown dwarfs, although the instrument is also used for research ranging from solar system to cosmological distance scales. Of recent note is the publication, last year, of the first extensive list of parallaxes for L and T dwarfs determined in the infrared. The observatory is also involved in the development of two-side buttable 2048x2048 InSb "Orion" arrays for use in future instrumentation. The successful applicant will be expected to assist at all levels of the current infrared astrometry program, including data reduction and analysis, maintaining and diagnosing IR software and hardware, and being involved in the design of new IR detectors and cameras. He/she can also expect to have 25% of his/her time available to carry on a strong program of internally supported personal research in infrared or related fields and will have significant input into the future scientific direction of future USNO research programs.

These positions are full civil service appointments and are expected to lead to permanent staff appointments at the Flagstaff Station. The positions are at the GS-12 or GS-13 level, depending upon the experience, qualifications, and salary history of the successful applicant (s). The salary range for GS-12 is \$60,576 to \$78,745 and for GS-13 \$72,035 to \$93,643. U.S. citizens will be given hiring preference. Applications received by October 31, 2005 will be given full consideration.

Applicants should send a discussion of their interests (including which of the two positions is being applied for) and qualifications, a list of recent publications, a list of three professional references (who will only be contacted after a short-list is established), and a brief curriculum vita to Dr. Jeff Pier, Director, US Naval Observatory Flagstaff Station, 10391 W Naval Observatory Rd, Flagstaff AZ 86001-8521, USA; or via email to jrp@nofs.navy.mil.

No. 21897**Postdoctoral Fellowship in Planetary Science****AUSTRALIAN NATIONAL UNIVERSITY****Chancelry 10A****Canberra, ACT 0200****Australia****Tel:****URL1: http://info.anu.edu.au/hr/Jobs/Academic_Positions/index.asp****(further particulars, selection criteria)****URL2: <http://wwwrphysse.anu.edu.au/amp/>****(further information)****Email Submission Address: jobs@anu.edu.au*****Attention: Recruitment Officer***

Atomic and Molecular Physics Laboratory, Research School of Physical Sciences and Engineering

Applications are invited for a postdoctoral fellowship in atmospheric photochemistry and radiative transfer modeling. The appointee's primary responsibility will be to participate in an investigation of the chemistry of the Venus middle atmosphere. This research will include examining the recent evolution of chemistry in the Venus middle atmosphere and/or interpreting data from ESA's Venus Express spacecraft. The incumbent will be able to participate in the Oxford-based Venus Express multi-disciplinary science team and the ANU's rapidly expanding Planetary Science Institute.

Applicants should have an earned PhD or equivalent in a relevant physical science discipline. Skills and experience in complex numerical simulations, atmospheric science, and/or chemical physics are highly desired. Good communication skills and the ability to work independently are required.

Appointment: Two-year fixed term. Salary Package: AUD 49,690 - AUD 59,963 pa plus 17% employer-provided superannuation contribution and a relocation allowance. Applicants holding a PhD will commence on a salary level no less than AUD 56,035 pa. Funding for this position has been received from the Australian Research Council. The appointment can commence immediately. Prior to submission, selection documentation must be sought from http://info.anu.edu.au/hr/Jobs/Academic_Positions/index.asp . Enquiries about the position: Dr. Frank Mills (Frank.Mills@anu.edu.au).

No. 21899**Professor in Astronomy****QUEEN MARY, UNIVERSITY OF LONDON****Astronomy Unit, School of Mathematical Sciences**

Mile End Road
London, London E1 4NS
United Kingdom
Tel: +44 20 7882 5455
FAX: +44 20 8981 9587
URL1: <http://www.maths.qmul.ac.uk/Astronomy>
(Astronomy Unit)
URL2: <http://www.maths.qmul.ac.uk/Astronomy/jobs/>
(Information and application form)
Email Submission Address: m.carter@qmul.ac.uk
Email Inquiries: j.p.emerson@qmul.ac.uk

Attention: Mariana Carter

Applications are invited for a permanent Professor in the Astronomy Unit of the School of Mathematical Sciences at Queen Mary, University of London, with an associated lectureship available in due course.

Applicants should have an outstanding record of research achievement and leadership preferably in either Cosmology or Planet Formation, although strong candidates in other areas may be considered if they focus, complement, and enhance the existing programmes of the Unit. Appointees will also be expected to teach in the School of Mathematical Sciences, which has buoyant student numbers.

The Professorial salary (minimum £45,647 per annum inclusive of London allowance) depends on qualifications and experience. The post is available from 1 January 2006 or as soon as possible thereafter.

For any further details on the Astronomy Unit which has a current faculty of 14 and computing facilities including a 156 CPU high performance cluster visit:
www.maths.qmul.ac.uk/Astronomy, and for an application form:
www.maths.qmul.ac.uk/Astronomy/jobs/

Informal enquiries: Professor Emerson, Astronomy Unit Director. Tel: +44 (0) 20 7882 5040; Fax +44 (0) 20 8981 9587; Email: j.p.emerson@qmul.ac.uk, or Professor Arrowsmith, Head of School (+44 (0) 20 7882 5464) Email: d.k.arrowsmith@qmul.ac.uk

Completed application forms and CVs should be returned quoting reference 05260/FD to Mariana Carter, School of Mathematical Sciences, Queen Mary, University of London, Mile End Road, London E1 4NS (Email m.carter@qmul.ac.uk). Applications will be considered until the post is filled, with the first review covering applications received by 01 October 2005.

No. 21900
Postdoctoral Research Position with S-COSMOS
CALIFORNIA INSTITUTE OF TECHNOLOGY
ASTRONOMY DEPT
MC 105-24
PASADENA, CA 91125
USA

Tel: 626-395-4979
FAX: 626-568-9352
URL1: <http://www.astro.caltech.edu/~cosmos/>
Email Submission Address: nzs@astro.caltech.edu
Email Inquiries: nzs@astro.caltech.edu

Attention: NICK SCOVILLE, PROF. OF ASTRONOMY

Applications are invited for one (or possibly) two postdoctoral positions associated with the Spitzer Survey of the HST-COSMOS 2-square degree field. The project has been allocated 220 hrs for a deep IRAC survey and shallow MIPS survey of the full COSMOS field. It is expected that one position will be located at the Institute for Astronomy, University of Hawaii, and one at Caltech in Pasadena, CA. S-COSMOS postdocs will also be expected to work directly with team members located at the Spitzer Science Center. Successful candidates will be members of the COSMOS team and will have the chance to participate in the wide range of ongoing multi-wavelength data analysis currently in progress. A more complete description of the COSMOS project can be found at the team website <http://www.astro.caltech.edu/~cosmos/>

Applicants with previous experience in extragalactic infrared astronomy and with the analysis of spacecraft infrared data are encouraged to apply. The expected starting date is on or after November 1st 2005. Applicants should hold a Ph.D. by the start of the position. The appointments are for one year, renewable for up to two more years based on satisfactory performance and availability of funds. Applicants should send a curriculum vitae, bibliography and statement of research interests, and arrange to have three letters of recommendation sent to Dr. Nick Scoville. Review of applications will begin on September 15, 2005 and will continue until the position(s) is filled. All applicants will be considered for the S-COSMOS positions at both institutions. Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

For additional information you can contact either

Dr. David Sanders Institute for Astronomy, Univ. of Hawaii, 2680 Woodlawn Drive, Honolulu, HI 96822 sanders@ifahawaii.edu

Dr. Nick Scoville Astronomy Dept., Caltech 105-24, Pasadena, CA 91125
nzs@astro.caltech.edu

No. 21903
Michelson Fellowships
CALIFORNIA INSTITUTE OF TECHNOLOGY
770 So. Wilson Ave.
MS 100-22
Pasadena, CA 91125
USA
Tel: 626-395-1931
URL1: <http://msc.caltech.edu>
Email Inquiries: gerard@ipac.caltech.edu

Attention: Dr. Gerard van Belle

The Michelson Science Center, California Institute of Technology, solicits applications for the Michelson Fellowship Program. The Michelson Fellowship Program invites applications for postdoctoral and graduate student fellowships in exoplanet research or related field at a US institution. Fellowships that propose astronomical applications or technology development of optical and IR interferometry or coronagraphy are particularly encouraged; proposals relevant to the science or technology development of Navigator projects, both experimental and theoretical, will also be considered. The program is open to applicants of any nationality.

The duration of the Fellowships is up to three years, including an initial appointment of two years, with extensions contingent on annual performance reviews and availability of NASA funding. Up to three new Michelson Postdoctoral Fellows and three Graduate Student Fellows will be appointed for initial terms starting in September 2006.

The Application Guidelines, which include program policies, application instructions, and forms, are available on the Michelson Science Center public website (<http://msc.caltech.edu>). The application deadline is Friday, November 11, 2005.

Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

No. 21904

NASA Research Fellowships in Astrophysics at Goddard Space Flight Center GODDARD SPACE FLIGHT CENTER

Tel:

URL1: <http://national-academies.org/rap>
(NRC website)

URL2: <http://universe.gsfc.nasa.gov>
(Exploration of the Universe Division)

Email Inquiries: rap@nas.edu

Attention: NAS/NRC

The National Research Council is accepting applications for Postdoctoral Associateships for research in astrophysics to be conducted in the Exploration of the Universe Division at the NASA-Goddard Space Flight Center (GSFC) in Greenbelt, MD. Research activities include data analysis and interpretation, instrument development, laboratory astrophysics, observational astrophysics, theoretical modeling and numerical astrophysics. Programs of research include extrasolar planetary science, Galactic and extragalactic astronomy and cosmology, studies of the cosmic microwave background, gravitational wave astrophysics and numerical relativity, x-ray and gamma-ray astronomy, and cosmic ray physics.

New technologies under development include interferometry from the infrared through the x-ray band, visible coronagraphy and wave-front correction, cryogenic detectors for infrared and x-ray astronomy, x-ray polarimeters, lightweight and ultra-precise optics (infrared through hard x-ray), imaging gamma-ray spectrometers, advanced ultraviolet detectors, and gravitational wave detectors. Opportunities exist for analysis of data from current missions (WMAP, RXTE, Chandra, XMM, Integral, HST, FUSE, GALEX, Swift, and the recently launched Suzaku) and previous space observatories. GSFC is actively involved in the development of new missions

such as JWST, TPF, Con-X, LISA, and GLAST, and development of mission concepts and/or instruments for TPF-C, SOFIA, JDEM, the Inflation Probe, Black Hole Finder Probe, as well as a number of Vision Missions and potential Explorer and Discovery missions. GSFC carries out a number of sounding rocket and balloon programs, and opportunities exist for ground-based observing from the IRTF, Keck, CSO, and the National Observatories.

For descriptions of research being carried out in the Exploration of the Universe Division at GSFC, please see the website: <http://universe.gsfc.nasa.gov>. For specific Associateship research areas, see <http://national-academies.org/rap>.

The NRC Associateship appointment, initially for one year, is nominally renewable for a second year based on acceptable performance. Extension to a third year is also possible, usually reserved for long-range projects. Appointments come with competitive stipends and a generous travel budget. Applicants will be judged on their academic accomplishments, letters of reference, and the merit of their research proposal and its relevance to NASA programs. The deadline for applications is November 1, 2005. Application instructions can be found at: <http://national-academies.org/rap>. For assistance contact the NRC at 202-334-2760 or email rap@nas.edu.

No. 21907

MIT Pappalardo Fellowships in Physics

MIT

77 Mass. Ave.

Bldg. NE25-4017

Cambridge, MA 02139

USA

Tel: 617-452-3040

FAX: 617-253-8554

URL1:

<http://web.mit.edu/physics/research/pappalardofellowshipsprogram/pappalardofellowshi>
(MIT Pappalardo Fellowships in Physics)

Email Inquiries: breen@mit.edu

Attention: Carol Breen, Communications Administrator

Faculty and senior researchers within the international community of physics, astronomy or related fields are invited to nominate candidates for the 2006-09 MIT Pappalardo Fellowships in Physics competition.

Nominees must be men or women of exceptional ability who currently have or will have received a doctoral degree in physics, astronomy or related fields no later than September 1, 2006. Nominations may be submitted either on-line at http://web.mit.edu/physics/newsandevents/pappalardo_nomination_form_06.html, or by requesting a paper nomination form from the Pappalardo Fellowships office.

The NOMINATION DEADLINE for the 2006-09 MIT Pappalardo Fellowships in Physics competition is FRIDAY, SEPTEMBER 16, 2005.

An application form with instructions will be mailed to nominees on a rolling basis up until this

deadline.

The MIT Pappalardo Fellowships in Physics program recruits and supports the most talented and promising physicists at an early stage in their careers. Each year, three new Fellows are selected for the three-year fellowship appointments. All Pappalardo Fellows are provided with:

--fully independent, unrestricted choice of research direction within the MIT Department of Physics throughout their three-year fellowship appointment;

--a competitive annual stipend with an annual cost-of-living increase, combined with \$5,000 per year in discretionary research funds [first-year Fellows for the 2006-09 academic year will receive an annual stipend of \$57,000];

--health insurance coverage for themselves and their dependents; and

--active faculty mentoring fostered by weekly luncheons and monthly dinners with the Department's faculty throughout the academic year.

Note that in order to participate in the MIT Pappalardo Fellowships competition, a candidate can ONLY be nominated by a faculty member or senior researcher within the international community of physics, astronomy or related fields. The Fellowships office cannot accept any materials sent by a self-nominated applicant.

New Jobs This Month

No. 21863

Faculty Positions in Physics

UNIVERSITY OF CALIFORNIA, BERKELEY

Department of Physics

366 LeConte Hall #7300

Berkeley, CA 94720-7300

USA

Tel: (510) 642-3316

FAX: (510) 643-8497

URL1: <http://physics.berkeley.edu/jobs/>

Attention: Marjorie D. Shapiro, Chair

FACULTY POSITIONS IN PHYSICS University of California, Berkeley

Pending budgetary approval, the Physics Department of the University of California, Berkeley intends to make three faculty appointments effective July 1, 2006. One position is targeted for Biophysics. One is targeted for Experimental Particle Physics. Candidates from all fields of Physics are invited to apply for the third position. Appointments at both tenure-track assistant professor and tenured levels will be considered.

Please send a curriculum vitae, bibliography, statement of research interests, and a list of references to Marjorie D. Shapiro, Chair, Department of Physics, University of California, 366 LeConte Hall #7300, Berkeley, CA 94720-7300, postmarked by Wednesday, November 23,

2005. In addition, please arrange to have one letter of recommendation sent in by this date. UC Berkeley's Statement of Confidentiality can be found at: <http://apo.chance.berkeley.edu/evalltr.html> .

E-mail applications will not be accepted. Applications submitted after the deadline will not be considered.

The University of California is an Equal Opportunity, Affirmative Action Employer.

No. 21865

Postdoctoral Fellow

CANADIAN INSTITUTE FOR THEORETICAL ASTROPHYSICS (CITA)

U of T

60 St. George Street

Toronto, Ontario M5S 3H8

Canada

Tel: 416-978-6879

FAX: 416-978-3921

Email Submission Address: <http://www.cita.utoronto.ca/webpages/index.shtml>

Email Inquiries: office@cita.utoronto.ca

Attention: J. Richard Bond, Director

Postdoctoral Fellowships CANADIAN INSTITUTE FOR THEORETICAL ASTROPHYSICS (CITA) University of Toronto Toronto, ON M5S 3H8 Canada Email Submission Address: <http://www.cita.utoronto.ca/webpages/index.shtml> Email Inquiries: office@cita.utoronto.ca Attention: Prof. J.R. Bond, Director

Postdoctoral research fellowships beginning September 1, 2006 are being offered at the Canadian Institute for Theoretical Astrophysics. A Ph.D. in any field of theoretical astrophysics is required. Fellows are expected to carry out original research in theoretical astrophysics under the general supervision of the permanent faculty whose interests include: cosmology, interstellar matter, nuclear and relativistic astrophysics, solar physics, star and planet formation, high energy astrophysics.

HOW TO APPLY:

We would prefer electronic submissions. Please check <http://www.cita.utoronto.ca> under "Working at CITA" for instructions. Applicants unable to do this, should send a curriculum vitae, statement of research interests and arrange to have 3 letters of recommendation sent to: Prof. J. Richard Bond, Director, CITA, McLennan Labs, 60 St. George Street, Toronto, Ontario CANADA, M5S 3H8. The deadline for applications and letters of recommendation is 1 December, 2005.

DEADLINE FOR APPLICATIONS AND ALL LETTERS OF RECOMMENDATION IS 1, DECEMBER 2005.

No. 21867

Senior Research Associate

CANADIAN INSTITUTE FOR THEORETICAL ASTROPHYSICS (CITA)**U of T****60 St. George Street****Toronto, Ontario M5S 3H8****Canada****Tel: 416-978-6879****FAX: 416-978-3921****Email Submission Address: <http://www.cita.utoronto.ca/webpages/index.shtml>****Email Inquiries: office@cita.utoronto.ca*****Attention: J. Richard Bond, Director***

Senior Research Associates CANADIAN INSTITUTE FOR THEORETICAL ASTROPHYSICS (CITA) University of Toronto Toronto, ON M5S 3H8 Canada Email Submission Address: <http://www.cita.utoronto.ca/webpages/index.shtml> Email Inquiries: office@cita.utoronto.ca Attention: Prof. J.R. Bond, Director

CITA is a national centre for theoretical astrophysics located at the University of Toronto. The Institute expects to offer one or more senior research associate positions of three to five years duration. The starting date will be 1 September, 2006. Applicants should have an excellent research record in astrophysics and postdoctoral experience. Funds will be available for travel and other research expenses. The primary duty is to carry out original research in theoretical astrophysics, but senior research associates are also expected to work with postdoctoral fellows and to assist with administration of the Institute.

All applicants for senior research associate positions will also be considered automatically for postdoctoral fellowships.

HOW TO APPLY:

We would prefer electronic submissions. Please check <http://www.cita.utoronto.ca> under "Working at CITA" for instructions. Applicants unable to access the web should mail a curriculum vitae; statement of research interests and arrange for three letters of recommendation to be sent to: Professor J. Richard Bond, Director, Canadian Institute for Theoretical Astrophysics, University of Toronto, 60 St. George Street, Toronto, Ontario, CANADA, M5S 3H8

DEADLINE FOR APPLICATIONS AND ALL LETTERS OF RECOMMENDATION IS 1, DECEMBER 2005.

All qualified candidates are encouraged to apply; although Canadians and permanent residents will be given priority. In accordance with its Employment Equity Policy, the University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities.

No. 21868**Space Telescope Science Institute Fellowship****SPACE TELESCOPE SCIENCE INSTITUTE****3700 San Martin Drive**

Baltimore, MD 21218
USA
Tel:
URL1: <http://www.stsci.edu>
Email Inquiries: fall@stsci.edu

Attention: Institute Fellowship Program

Applications are invited for the Space Telescope Science Institute Fellowship. This fellowship provides up to three years of support for outstanding postdoctoral researchers in any field of astronomy, astrophysics, or planetary science. The research may be theoretical, observational, or instrumental. The fellowship includes a salary of approximately \$50,000, generous benefits, and annual funds of \$15,000 to cover research expenses. The selection will be based on the accomplishments and proposed research of the applicants. There are no restrictions on citizenship or date of PhD degree.

Applications must include three copies each of the following materials: a signed cover letter, a curriculum vitae, a list of publications, a summary of previous and current research (limited to 3 pages), and a description of the proposed research to be carried out at STScI (also limited to 3 pages). These should be sent to: Institute Fellowship Program, Space Telescope Science Institute, 3700 San Martin Drive, Baltimore, MD 21218 (hardcopy required). Applicants must also arrange for three letters of reference to be sent to the same address (hardcopy required).

Applications and letters of reference received by Friday, November 11, 2005 will receive full consideration. The offer of appointment will be made before February 1, 2006; the appointment itself is expected to begin on or about September 1, 2006. Inquiries about the Institute Fellowship may be directed to Dr. Michael Fall (410-338-4833, fall@stsci.edu).

The Space Telescope Science Institute is operated by the Association of Universities for Research in Astronomy, and is an affirmative action, equal opportunity employer. Women and members of minority groups are strongly encouraged to apply.

No. 21869
Chandra Postdoctoral Fellowships, Chandra X-Ray Center
SMITHSONIAN ASTROPHYSICAL OBSERVATORY
60 Garden Street
MS #4
Cambridge, MA 02138
USA
Tel: (617) 495-7146
FAX: (617) 495-7577
URL1: <http://cxc.harvard.edu/fellows/>
(Policies & Application Instructions.)
Email Submission Address: nevans@cfa.harvard.edu
Email Inquiries: nevans@cfa.harvard.edu

Attention: Dr. Nancy Evans

Chandra Postdoctoral Fellowships Chandra X-Ray Center E-mail:
fellows@head.cfa.harvard.edu WWW: <http://cxc.harvard.edu/fellows/>

Attention: Chandra Fellowship Program Office

The Chandra X-ray Center (CXC) is pleased to announce the ninth competition for the Chandra Postdoctoral Fellowship Program, in cooperation with host institutions throughout the United States. The primary objective of the Program is to provide opportunities for postdoctoral research on problems that are broadly related to the scientific mission of the Chandra X-ray Observatory and compatible with the interests of the Host Institutions. This program is open to applicants of any nationality who earn doctoral degrees between January 1, 2003 and September 1, 2006 in astronomy, physics, or related disciplines. The Fellowships are tenable at any U.S. institution where Chandra-related research can be carried out.

The Fellowship is initially for two years, with the expectation of a third year, contingent upon performance and available funding. Subject to the availability of NASA funding up to 5 Chandra Fellows will be appointed this year, through grants to United States institutions.

The Call for Proposals for the Fellowship Program, which includes detailed Program policies and application instructions is available on the World Wide Web at <http://cxc.harvard.edu/fellows/> An application includes a cover form, a research proposal, letters of reference, a curriculum vitae, and other relevant materials as detailed in the instructions. Full instructions for submitting applications through the web are contained in the Call for Proposals.

The application deadline is 9 November, 2005 (5:00 pm EST). The Chandra Fellow appointments are expected to begin on or about 1 September 2006. Women and members of minority groups are strongly encouraged to apply.

No. 21906
Assistant Professor of Physics
UNIVERSITY OF CENTRAL FLORIDA
University of Central Florida
P.O. Box 162385
Orlando, FL 32816-2385
USA
Tel: 407/823-6286
FAX: 407/823-5112
URL1: <http://www.physics.ucf.edu>
(Physics Department web page)

Attention: Dr. Subir Bose, Chair, Search Committee

FACULTY POSITIONS IN PHYSICS/PLANETARY SCIENCE

The Department of Physics at the University of Central Florida invites applications for four tenure-track positions at the rank of Assistant Professor. The Department of Physics is a Ph.D.-granting department in the UCF College of Arts and Sciences. UCF is a leading metropolitan research university located in Orlando with 43,000 students and 30 Physics

faculty. UCF is expecting continued growth. This announcement seeks qualified applicants in the areas of astronomy/planetary science, biophysics/soft condensed matter, condensed matter/materials, atomic/molecular/optical physics, and physics education research. Applicants must hold a Ph.D. in Physics or a closely related discipline by August 8, 2006, and have appropriate research and teaching experience. Interested persons should send a letter of application, a current curriculum vitae, a research plan, and a statement of teaching philosophy and experience to Dr. Subir Bose, Search Committee Chair, Department of Physics, University of Central Florida, P.O. Box 162385, Orlando, FL, 32816-2385, and have three letters of reference sent to the same address. Review of applications will begin on September 1, 2005, and continue until the positions are filled. Further information is available at www.physics.ucf.edu. The University of Central Florida is an affirmative action/equal opportunity employer committed to excellence through diversity.

No. 21914**Faculty Position in Astronomy****UNIVERSITY OF CALIFORNIA, BERKELEY****601 Campbell Hall****Berkeley, CA 94720-3411****Tel: (510) 642-7091****FAX: (510) 642-3411****Email Submission Address: ldowling@berkeley.edu*****Attention: Prof. Leo Blitz, c/o Ms. Lorraine Dowling***

Faculty Position in Astronomy University of California, Berkeley Department of Astronomy 601 Campbell Hall Berkeley, Ca. 94720-3411

Attention: Prof. Leo Blitz, c/o Lorraine Dowling

The Department of Astronomy at the University of California, Berkeley intends to make a junior faculty appointment effective July 1, 2006. Candidates from all fields of astrophysics are invited to apply; applicants working in extragalactic astronomy and cosmology using radio or other observational and experimental techniques are particularly encouraged.

The Department of Physics will also be conducting a faculty search which includes astrophysics; applicants interested in this additional opportunity should send a separate application directly to the Department of Physics.

Please mail a curriculum vitae, bibliography, statement of research interests, and arrange to have three letters of reference sent to: Professor Leo Blitz, Faculty Search Committee, c/o Ms. Lorraine Dowling, Department of Astronomy, 601 Campbell Hall, University of California, Berkeley, Ca. 94720-3411. Applications should be postmarked by December 1, 2005; late applications will not be considered. Fax or email applications will not be accepted. Refer potential reviewers to the UC Berkeley Statement of Confidentiality found at: <http://apo.chance.berkeley.edu/evalltr.html>

The University of California, Berkeley is committed to affirmative action by actively recruiting qualified women and minorities for employment opportunities: Affirmative Action Employer/Equal Opportunity Employer.

No. 21915
Postdoctoral Positions
KOREA ASTRONOMY AND SPACE SCIENCE INSTITUTE(KASI)
61-1 Hwaam-dong, Yuseong-gu,
Daejeon, . 305-348
Korea
Tel: +82 42 865 3205
FAX: +82 42 865 2020
URL1: <http://www.kasi.re.kr>
Email Submission Address: kjha@kasi.re.kr
Email Inquiries: kjha@kasi.re.kr

Attention: Ms. Jeongha Kang

Korea Astronomy and Space Science Institute(KASI) invites applications for three postdoctoral positions in the following fields : one in any field of astronomy and astrophysics, the others in interstellar medium, high energy astrophysics, or cosmology. The successful applicants are encouraged to carry out independent research.

A Ph.D. in astronomy or astrophysics is required. The appointment is initially for one year and can be renewed for another year contingent on satisfactory performance. The positions are available immediately.

Korea Astronomy and Space Science Institute(KASI) will provide an appropriate stipend, research fund, and other benefits such as health insurance and dormitory space.

Interested applicants should submit resume, list of publications, and brief description of research interests and plans, and arrange for three letters of recommendation to be sent to the above address via airmail. Both airmail and email applications are accepted by October 15, 2005.

No. 21916
Postdoctoral Fellow (Infrared Instrumentation)
SPACE TELESCOPE SCIENCE INSTITUTE
3700 San Martin Dr.
Baltimore, Maryland 21218
United States
Tel:
URL1: <http://www.stsci.edu>
Email Submission Address: rueter@stsci.edu
Email Inquiries: meixner@stsci.edu

Attention: Christine Rueter, Sr. Employment Administrator

Applications are invited for a postdoctoral research position at the Space Telescope Science Institute Starting as early as fall 2005. The successful applicant will work with Drs. Meixner and Figer on the development of the WIYN high resolution infrared camera (WHIRC) and the testing of detectors for future missions (e.g. JWST). WHIRC is scheduled to be commissioned

on WIYN by December 2006.

The postdoctoral researcher will work on the integration and testing of the instrument, which will include some development work, and will use WHIRC for astronomical observations post-commissioning. The postdoctoral researcher will perform testing of new detectors using an existing facility.

Experience with the development of astronomical instrumentation is required. A PhD in Astronomy or Physics or engineering is required. Duration of the postdoctoral position is 2 years, with a potential extension to 3 years dependent upon availability of funds.

STScI is located on the Johns Hopkins University Campus in Baltimore, Maryland. We offer an excellent benefits packages, competitive salaries, and a stimulating work environment.

Applicants should send a cover letter with position applying for, curriculum vitae, list of publications, and a brief statement of research interests, accomplishments, and relevant technical expertise to the address below:

Space Telescope Science Institute ATTN: Human Resources, Req 464 3700 San Martin Drive
Baltimore, MD 21218

They should also arrange for three letters of recommendation to be sent directly to the same address. Completed applications received by September 31, 2005 are assured of full consideration. Women and members of minority groups are strongly encouraged to apply.
EOE/AA/M/F/D/V

Inquires regarding this position can be submitted to: meixner@stsci.edu

No. 21918

Postdoctoral Level Researchers in Theoretical Astrophysics and Relativity

KAVLI INSTITUTE FOR THEORETICAL PHYSICS

Tel:

URL1: <http://www.kitp.ucsb.edu/activities>

(Institute Website)

Email Submission Address: pdapps@kitp.ucsb.edu

Email Inquiries: bildsten@kitp.ucsb.edu

Attention: Professor David Gross

Postdoctoral Level Researchers in Theoretical Astrophysics and Relativity KAVLI INSTITUTE
FOR THEORETICAL PHYSICS Kohn Hall University of California, Santa Barbara Santa
Barbara, CA 93106

Inquiries to Lars Bildsten (bildsten@kitp.ucsb.edu)

The Kavli Institute for Theoretical Physics (KITP) expects to appoint multiple Postdoctoral Level Researchers as Associate Specialists in theoretical astrophysics and relativity starting September 1, 2006. The KITP's purpose is to contribute to the progress of theoretical physics, especially in areas overlapping the traditional subfields, in ways that are not easily realized in

existing institutions. The scientific work is carried out by approximately 60 members, including the director, deputy director, 5 permanent members, 10-15 postdoctoral members, and 40-45 visiting senior members. KITP permanent members and postdoctoral fellows are active in all areas of theoretical physics, including astrophysics and relativity. Most visiting members are participants in major programs that last 4-6 months, there are at least six programs per year. Current and future astrophysics programs include Physics of Astrophysical Outflows and Accretion Disks (April-July 2005), SuperNova Gamma-Ray Burst Connection (Jan-March 2006), Physics of Galactic Nuclei (May-Jul 2006), Applications of Gravitational Lensing: Unique Insights into Galaxy Formation and Evolution (Sep-Nov 2006), and Accretion and Explosion: the Astrophysics of Degenerate Stars (Feb-May 2007). KITP postdocs also have opportunities for international collaborations with CITA and MPA-Garching. For current information on this and other programs, see <http://www.kitp.ucsb.edu/activities>. Applications should be made electronically via our web page. A resume, statement of research interests and three letters of recommendation should be sent electronically to pdapps@kitp.ucsb.edu. Inquiries regarding scientific and/or programmatic issues may be addressed to Professor Lars Bildsten (bildsten@kitp.ucsb.edu). In the event that you are unable to email your letters, hard copies should be sent to Professor David Gross, Director, Kavli Institute for Theoretical Physics, University of California, Santa Barbara, CA 93106-4030. The deadline for applications and all materials is December 1, 2005. Later applications will be considered only as long as openings exist. The University of California, Santa Barbara is an Equal Opportunity/Affirmative Action Employer.

No. 21919**Clay Postdoctoral Fellowship 2006****SMITHSONIAN ASTROPHYSICAL OBSERVATORY****60 Garden Street, Mail Stop 47****Cambridge, MA 02138****USA****Tel: 617-495-7103****URL1: <http://www.cfa.harvard.edu/postdoc/>****Email Submission Address: postdoc@cfa.harvard.edu****Email Inquiries: postdoc@cfa.harvard.edu*****Attention: Fellowship Program Coordinator***

Smithsonian Astrophysical Observatory Clay Postdoctoral Fellowship 2006

The Smithsonian Astrophysical Observatory invites applications for the Clay Postdoctoral Fellowship 2006, which will be awarded to an outstanding researcher displaying significant promise in theory, observation, instrumentation, and/or laboratory experiments.

This Fellowship program is located at the Harvard-Smithsonian Center for Astrophysics, which combines the resources and research facilities of the Harvard College Observatory and the Smithsonian Astrophysical Observatory under a single director. Now organized in six research divisions—Atomic and Molecular Physics; High Energy Astrophysics; Optical and Infrared Astronomy; Radio and Geoastronomy; Solar, Stellar, and Planetary Sciences; and Theoretical Astrophysics—nearly 350 Smithsonian and Harvard scientists work cooperatively in an environment that welcomes the ideas and contributions of young scientists.

The facilities include the MMT (Fred Lawrence Whipple Observatory, Arizona), Magellan (Las Campanas Observatory, Chile), and other optical and infrared telescopes; radio telescopes, especially the Submillimeter Array on Mauna Kea, Hawaii; a large Beowulf cluster and network of workstations; a number of specialized laboratories; an outstanding library system; and access to data from a wide range of space missions, especially the Chandra X-ray Observatory and the Spitzer Space Telescope.

Appointments are for 4 years. The stipend for 2006–2007 will be approximately \$52,000 with a research budget of \$14,000. Funds are also provided for health benefits and relocation expenses. Recent Ph.D. recipients are encouraged to apply.

Application forms and instructions are available at <http://cfa-www.harvard.edu/postdoc/>. Applications are due by November 1, 2005. Offers will be made by December 20, 2005.

The Harvard-Smithsonian Center for Astrophysics is an Equal Opportunity/Affirmative Action Employer where all qualified applicants receive consideration for employment without regard to race, creed, color, sex or national origin.

No. 21920
CfA Postdoctoral Fellowship 2006
SMITHSONIAN ASTROPHYSICAL OBSERVATORY
60 Garden Street, Mail Stop 47
Cambridge, MA 02138
USA
Tel: 617-495-7103
URL1: <http://cfa-www.harvard.edu/postdoc/>
Email Inquiries: postdoc@cfa.harvard.edu

Attention: Fellowship Program Coordinator

Harvard-Smithsonian Center for Astrophysics CfA Postdoctoral Fellowship 2006

The Harvard-Smithsonian Center for Astrophysics (CfA) invites applications for the CfA Postdoctoral Fellowship 2006, which will be awarded to an outstanding researcher displaying significant promise in theory, observation, instrumentation, and/or laboratory experiments.

The CfA combines the resources and research facilities of the Harvard College Observatory and the Smithsonian Astrophysical Observatory under a single director. Now organized in six research divisions—Atomic and Molecular Physics; High Energy Astrophysics; Optical and Infrared Astronomy; Radio and Geoastronomy; Solar, Stellar, and Planetary Sciences; and Theoretical Astrophysics—nearly 350 Smithsonian and Harvard scientists work cooperatively in an environment that welcomes the ideas and contributions of young scientists.

The facilities include the MMT (Fred Lawrence Whipple Observatory, Arizona), Magellan (Las Campanas Observatory, Chile), and other optical and infrared telescopes; radio telescopes, especially the Submillimeter Array on Mauna Kea, Hawaii; a large Beowulf cluster and network of workstations; a number of specialized laboratories; an outstanding library system; and access to data from a wide range of space missions, especially the Chandra X-ray Observatory and the Spitzer Space Telescope.

Appointments are for 2 years, with renewal for a third year likely, contingent upon satisfactory progress. The stipend for 2006–2007 will be approximately \$50,000 with a research budget of \$13,000. Funds are also provided for health benefits and relocation expenses. Only applicants who receive their degrees between July 1, 2005, and September 1, 2006, will be considered.

Application forms and instructions are available at <http://cfa-www.harvard.edu/postdoc/>. Applications are due by November 1, 2005. Offers will be made by December 20, 2005.

The Harvard-Smithsonian Center for Astrophysics is an Equal Opportunity/Affirmative Action Employer where all qualified applicants receive consideration for employment without regard to race, creed, color, sex or national origin.

No. 21921

Theoretical High Energy Physics/Astrophysics

UNIVERSITY OF UTAH

115 S 1400 E #201

Salt Lake City, UT 84112-0830

USA

Tel: 801-581-5697

FAX: 801-581-4801

URL1: <http://www.physics.utah.edu/>

(Department Web Page)

Email Submission Address: heidi@physics.utah.edu

Email Inquiries: heidi@physics.utah.edu

Attention: HEAP Theory Search Committee, Department of Physics

The Physics Department at the University of Utah is seeking qualified candidates for one or more tenure track positions in theoretical high-energy physics/astrophysics. Preference will be given for hiring at the Assistant Professor level, but more senior level appointments may also be considered. We seek candidates with theory research experience in at least one of the following areas: string theory, particle physics phenomenology, particle astrophysics, or cosmology. The successful candidate(s) will have a strong commitment to both teaching and research, will develop his/her own research program, potentially collaborating with existing high-energy physics and astrophysics research groups. The University of Utah is a major participant in several high-energy astrophysics projects, including AUGER, VERITAS, Telescope Array, and the High-Resolution Fly's Eye Observatory, and also maintains a strong theoretical research effort in high-energy physics and astrophysics, including cosmology (dark matter/dark energy), planet formation, string theory (with a joint program with the Mathematics Department), and computational QCD. This appointment requires teaching undergraduate/graduate courses in Physics/Astronomy.

We expect that the successful candidate will be interviewed in Spring 2006 and will begin his/her appointment July 2006. Each candidate should submit his/her curriculum vitae, statement of research interests, and at least five letters of recommendation by December 15, 2005 to:

HEAP Theory Search Committee University of Utah Department of Physics 115 South 1400 East #201 Salt Lake City, UT 84112-0830

The University of Utah is an equal opportunity/affirmative action employer, encourages applications from women and minorities, and provides reasonable accommodations to the known disabilities of applicants and employees.

No. 21922**KICP Postdoctoral Research Fellow at the Rank of Research Associate****THE UNIVERSITY OF CHICAGO****5640 South Ellis Avenue****Chicago, IL 60637****USA****Tel: 773-702-7848****FAX: 773-834-8279****URL1: <http://kicp.uchicago.edu/>****Email Submission Address: centerfellow@kicp.uchicago.edu*****Attention: Stephan Meyer, Director, KICP***

KICP Postdoctoral Research Fellow at the Rank of Research Associate The KICP invites applications for one or more NSF Funded Postdoctoral Research Fellows (at the rank of Research Associate) from young scientists of exceptional ability and promise who will have received a PhD. in Physics, Astrophysics or related fields by September 2006. The appointee (s) will be expected to conduct original research in experimental, numerical or theoretical cosmology in an interdisciplinary environment. The initial appointment is for one year, renewal annually, for up to three years. Our positions at the rank of Research Associate have competitive salaries and carry faculty-level benefits. Institute Fellows have the freedom to work on any of the efforts in our Institute. Research at the Kavli Institute for Cosmological Physics (KICP), based at the University of Chicago, is focused on interdisciplinary topics in cosmological physics: characterizing the Dark Energy, studying the inflationary era, and understanding the highest energy gamma and cosmic rays. Experimental studies of the CMB (polarization anisotropy and the Sunyaev-Zel'dovich effect) and Cosmic Infrared Background; analysis of cosmological data including CMB data and large-scale structure survey data; analysis of Sloan Digital Sky Survey data; high energy astrophysics with photons and cosmic rays; direct detection of Dark Matter particles and numerous topics in theoretical cosmology constitute the current slate of activities. The KICP is seeking to expand the fellowship program to include researchers working on innovative data analysis techniques for large-scale structure, CMB, and other cosmological data. The KICP also has active visitors, symposia, and education/outreach programs. Information about the KICP can be found at <http://kicp.uchicago.edu/> . An application consisting of a Curriculum Vitae, a statement of research interests, and at least three letters of recommendation should be sent to centerfellow@kicp.uchicago.edu or to Stephan Meyer, Director, Kavli Institute for Cosmological Physics, 5640 S. Ellis Avenue, Chicago, IL 60637. Review of applications will begin on November 15, 2005 for positions that will begin in the Summer or Fall of 2006. The position will remain open until filled. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

No. 21923**Assistant Professor Position in Astronomy and Astrophysics****UW-MADISON****475 N Charter Street**

**5534 Sterling Hall
Madison, WI 53706
USA**

Tel:

URL1: <http://www.astro.wisc.edu>

(Astronomy Department Web Site UW-Madison)

Email Submission Address: facultysearch@astro.wisc.edu

Email Inquiries: facultysearch@astro.wisc.edu

Attention: Faculty Search Committee, University of WI-Madison

The Department of Astronomy at the University of Wisconsin-Madison invites applications for a tenure-track Assistant Professor appointment in astronomy and astrophysics. Appointment to begin August 2006. A Ph.D. in Astronomy or a closely related field, postdoctoral research experience in astronomy or astrophysics, teaching experience, and a strong record of original published research are required. Duties include teaching, research, and professional service.

The Department has a 26% share of the WIYN (Wisconsin-Indiana-Yale-NOAO) 3.5m and 0.9m telescopes on Kitt Peak and a 15% share of the 11m Southern African Large Telescope (SALT) in South Africa. The Space Astronomy Laboratory (SAL) provides an existing infrastructure for hardware and software engineering, production, and testing. The current departmental areas of expertise include: stellar astrophysics, theory and observation of the interstellar and intergalactic media, observational studies of galaxies and cosmology, galactic dynamics, and plasma astrophysics. We are particularly interested in strengthening our program in the areas of instrumentation, numerical astrophysics, observational astronomy utilizing both WIYN and SALT, stellar astrophysics, and radio astronomy. However, applicants with research interests in all areas of astronomy and astrophysics will be considered.

Applicants should include a bibliography, curriculum vitae, a brief summary of research and teaching interests, have three letters of recommendation sent to the address below. To ensure full consideration, applications must be received by December 15, 2005. Application materials should be sent to Faculty Search Committee, Department of Astronomy, University of Wisconsin-Madison, 5534 Sterling Hall, 475 N. Charter St., Madison, WI 53706-1582.

The University of Wisconsin-Madison is an affirmative action/equal opportunity employer. Women and minorities are encouraged to apply. Unless confidentiality is requested in writing, information regarding applicants must be released. Finalists cannot be guaranteed confidentiality.

**No. 21924
Postdoctoral Research Fellow
CALIFORNIA INSTITUTE OF TECHNOLOGY
1200 E. California Blvd.
MS 220-6
Pasadena, CA 91125
USA
Tel:**

Attention: Dr. Lin Yan

Applications are invited for a postdoctoral position in extragalactic astrophysics at the Spitzer Science Center at Caltech. The successful applicant will work with Dr. Lin Yan on projects studying infrared luminous galaxies at high redshifts. The research will involve two major Spitzer programs, which focus on the optical and MIR spectroscopic characterization of high redshift starburst galaxies. The mid-IR spectroscopic survey of infrared luminous galaxies is an approved Spitzer GO-2, medium size program, using the Spitzer mid-IR spectrograph. We also have the coordinated ground-based optical/near-IR spectroscopy from the ground-based telescopes. The goal of these spectroscopic studies is to understand the evolution history of starburst galaxies out to $z \sim 3$.

Responsibilities will include: reducing data, including both ground-based as well as Spitzer images and spectra; analysis, modeling and interpretation of the data; and publication of scientific results. The successful applicants will have access to the Caltech 200-inch and 60-inch telescopes at Palomar Mountain. They are also encouraged to take advantage of Spitzer data in the archive as well as apply for the Spitzer Space Telescope time. Candidates should have obtained, by the starting date, a Ph.D. in astronomy, physics or equivalent, in an area relevant to these projects. Experience with extragalactic astronomy is highly desirable.

The appointment is for two years with the possibility of renewal for an additional year, and could start as early as February 2006. To apply, please send resume, publication list, and statement of research to the above address as soon as possible, and have three letters of reference forwarded to the same address. Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

No. 21925
Postdoctoral Research Fellow
CALIFORNIA INSTITUTE OF TECHNOLOGY
1200 E. California Blvd.
MS 220-6
Pasadena, CA 91125
USA
Tel: 626-395-1881
Email Submission Address: vandyk@ipac.caltech.edu

Attention: Dr. Schuyler Van Dyk

Postdoctoral Research Fellow in Supernova Studies CALIFORNIA INSTITUTE OF TECHNOLOGY 1200 E. California Blvd. MS 220-6 Pasadena, CA 91125 USA Tel: 626-395-1881

Attention: Dr. Schuyler Van Dyk

A postdoctoral position in supernova studies is available at the Spitzer Science Center located on the California Institute of Technology campus in Pasadena, California. The successful applicant will work with Dr. Schuyler Van Dyk studying supernovae, their environments in their host galaxies, and their stellar progenitors, using Hubble Space Telescope (HST) and Spitzer Space Telescope data. Preference will be given to candidates with experience in optical and/or infrared observations and data analysis. Experience with analysis of HST imaging data and

interest in the astrophysics of supernovae are desirable. The appointment will be for 1 year, with the potential for renewal for up to two more years, contingent upon availability of funding. Start date is negotiable. Qualified candidates must have a PhD prior to starting the position. Applicants should submit a curriculum vitae, list of publications, and names of and contact information for three references to Dr. Van Dyk at the above address, or at vandyk@ipac.caltech.edu, by 2005 October 15 to receive full consideration.

Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

No. 21926
Postdoctoral Research Associate
CALIFORNIA INSTITUTE OF TECHNOLOGY
770 So. Wilson Ave.
MS 100-22
Pasadena, CA 91125
USA
Tel:

Attention: Mary Ellen Barba, Supervisor of Staff Operations

Postdoctoral Research Associate in Infrared Astronomy Michelson Science Center (MSC)
California Institute of Technology 770 So. Wilson Ave. MS 100-22 Pasadena, CA, 91125 USA

Attention: Mary Ellen Barba Supervisor of Staff Operations

Applications are invited for a postdoctoral research position to work with Drs. David Ciardi, Michael Werner, and members of the MSC and JPL scientific staff on the analysis of Spitzer Infrared Spectrograph (IRS) observations of debris disks surround AFGKM main sequence stars. The applicant is expected to lead the reduction effort of the Spitzer data and to work with the team on the analysis to determine the evolution of structure, composition, radial distribution as a function of stellar properties and age.

Candidates should have obtained, by the starting date, a Ph.D. in Astronomy, Physics, Astrophysics, or equivalent. Research experience with dust disks around young stars and with mid-infrared observations, particularly with Spitzer IRS data, is highly desirable.

The MSC is on the Caltech campus and is administratively part of the Infrared Processing and Analysis Center. Postdoctoral Research Associates may apply for time at Palomar observatory, and are encouraged to use the Spitzer Space Telescope for their research as well. Support will be provided for computing, travel to conferences or observatories, page charges, and similar research activities. This position is funded for a minimum one year with additional years contingent upon performance. The start date is flexible, but preferably before December 2005. Applications should include a letter describing relevant experience and interests (two-page limit), curriculum vita, bibliography, and the names and contact information of three references. The application deadline is 15 October 2005.

Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

No. 21927
Spitzer Space Telescope Fellowship Program
CALIFORNIA INSTITUTE OF TECHNOLOGY
1200 E. California Blvd.
Mail Code 314-6
Pasadena, CA 91125
USA

Tel:

URL1: <http://ssc.spitzer.caltech.edu/geninfo/fellows/>

Email Inquiries: fellows@spitzer.caltech.edu

Attention: Spitzer Space Telescope Fellowship Program

The Spitzer Science Center, California Institute of Technology solicits applications for the Spitzer Space Telescope Postdoctoral Fellowship Program. The program provides opportunities for postdoctoral research that will enhance the overall scientific return from the Spitzer mission. This can be accomplished through a proposal to conduct new observations with Spitzer, through exploitation of Spitzer archival databases, or through research that aids in the interpretation of Spitzer results, including theoretical investigations and laboratory astrophysics. Research must be conducted at a U.S.-based Host Institution chosen by the Fellow. The program is open to applicants of any nationality who have earned (or will have earned) their doctoral degrees after 1 January 2003, in astronomy, physics, or related disciplines.

The duration of the Fellowships is up to three years, including an initial appointment of one year, and extensions contingent on annual reviews of performance and the availability of NASA funding. Up to five new Spitzer Fellows will be appointed for initial terms starting in September 2006.

The Application Guidelines, which includes program policies, application instructions, and forms, are available on the Spitzer Science Center public Web site at <http://ssc.spitzer.caltech.edu/geninfo/fellows/>. The application deadline is Tuesday, November 1, 2005.

Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

No. 21928
Research Position in Observational Cosmology
U. LOUISVILLE
102 Natural Sciences Bldg
Louisville, Kentucky 40292
USA
Tel: 502/852-6790
FAX: 502/852-0742
URL1: <http://fuse.pha.jhu.edu/~williger/scientist.html>
(for further details)
Email Submission Address: williger@pha.jhu.edu
Email Inquiries: williger@pha.jhu.edu

Attention: Gerard Williger, Dept. of Physics & Astronomy

A research position is available from autumn 2005 to work with Dr. Gerard Williger at Louisville in the area of large-scale structure at high redshift, high redshift galaxies and the intergalactic medium. Research would be on HST, GALEX and Chandra projects concentrating on large quasar groups, the foreground proximity effect and Lyman-alpha blobs. There are also ground-based program aspects dealing with medium and high dispersion spectroscopy, plus broadband and Fabry-Perot images. Innovative methods to exploit data archives in these areas would be desirable. An interest in proto-planetary disks may also be helpful.

The position is initially for two years. Grant experience and communication skills are highly desired. Independent complementary research would be encouraged, and teaching opportunities are available, if desired. Entry level (post-doc to research faculty) will be commensurate with experience.

Louisville has a joint PhD program with Kentucky and aims to strengthen its astronomy. Research areas which could result in collaborations with astronomers at nearby institutions (especially Kentucky, Cincinnati and Indiana) would be desirable. The area combines a low cost of living with the amenities of a large city. Applicants must have a PhD, and should e-mail in postscript or pdf format a CV, bibliography, two page research statement including a discussion of how the applicant can contribute to the above research topics and the names and contact information of three references to the above address. Applications will be reviewed beginning October 1, 2005 and will be considered until the position is filled. Louisville is an EOE/AA employer.

No. 21929**Postdoctoral Research Staff Member****LAWRENCE LIVERMORE NATIONAL LABS****Tel:****URL1: <http://jobs.llnl.gov>****Attention: Christine**

POSTDOCTORAL RESEARCH STAFF MEMBER

Lawrence Livermore National Laboratory

Livermore, CA

The High Energy Density Physics and Astrophysics Division (V Division) of the Physics and Advanced Technologies Directorate at Lawrence Livermore National Laboratory (LLNL) has an opening for a qualified postdoctoral candidate. The candidate will work with Christopher Mauche and Duane Liedahl at LLNL and collaborators at the University of Chicago and the University of Illinois to develop radiation hydrodynamic models of the accretion flows and winds of white dwarf, neutron star, and black hole binaries, with the aim of producing detailed theoretical spectra that can be tested against observational data.

The qualified candidate will have a recent PhD in Physics or Astrophysics, with expertise in

computational astrophysical fluid dynamics; experience with radiation transport and X-ray spectroscopy is desired. The individual must have the necessary communication skills to author technical and scientific reports and publications and to deliver scientific presentations. The candidate will work independently and in a team environment to achieve program goals in a timely fashion.

LLNL offers a challenging environment and a competitive salary/benefits package. To view and apply for this job, go to <http://jobs.llnl.gov>, Search by job # 003343. When applying and prompted please mention where you saw this ad. LLNL is operated by the University of California for the Department of Energy. We are proud to be an equal opportunity employer with a commitment to workforce diversity.

Lawrence Livermore National Laboratory

<http://jobs.llnl.gov>

No. 21930
POSTDOCTORAL POSITIONS IN THEORETICAL AND OBSERVATIONAL
ASTROPHYSICS AND COSMOLOGY
NEW YORK UNIVERSITY
Department of Physics
4 Washington Place
New York, NY 10003
USA
Tel: 212-992-8780
FAX: 212-995-4093
URL1: <http://cosmo.nyu.edu/>
URL2:
URL3:
Email Inquiries: dpm4@nyu.edu

Attention: Dan McOlvin

The astrophysics and cosmology group at NYU anticipates filling openings for postdoctoral research scientists in theoretical or observational astrophysics, cosmology, or astroparticle physics starting in Fall 2006, or earlier if appropriate.

The group at NYU presently consists of Professors Michael Blanton (observational astrophysics), Andrei Gruzinov (theoretical astrophysics and cosmology), David Hogg (galaxy astrophysics and observational cosmology), Patrick Huggins (planetary nebulae), Roman Scoccimarro (large scale structure) and Glennys Farrar (phenomenological cosmology, dark matter and dark energy, ultrahigh energy cosmic rays). There is intensive collaboration with particle theorists G. Dvali (extra dimensions, cosmology), G. Gabadadze (modifications to gravity, cosmology and particle/string theory), Neal Weiner (beyond the standard model), and members of NYU's Courant Institute. Postdoctoral research scientists pursue independent research projects, or work with others in the group, as their interests dictate. Current postdocs in astrophysics are A. Berlind, E. Sheldon, B. Willman, and, in related aspects of particle theory, J. Blanco-Pillado, Spencer Chang, A. Iglesias, and Michele Redi.

Postdocs benefit from the lively atmosphere of the Center, a vigorous visitors program, and other nearby astrophysics research groups. Appointments are usually for two years, with a possible third year, subject to funding availability. Exceptional candidates will be considered for longer term appointments. Those proposing to come with funding from Hubble Fellowship or similar programs will be eligible for continuation of their appointment for a follow-on year.

Applications received by November 1, 2005 will receive top priority. They should include a curriculum vitae, a statement of research interests, and three letters of recommendation. They should be addressed to: Astrophysics Postdoctoral Position, c/o Dan McOlvin, Center for Cosmology and Particle Physics, New York University, 4 Washington Place, New York, NY 10003. NYU is an Equal Opportunity/Affirmative Action Employer.

No. 21931**Tenure track Faculty Positions - Physics and Astronomy****UNIVERSITY OF BRITISH COLUMBIA****6224 Agricultural Road****Vancouver, British Columbia V6T 1Z1****Canada****Tel: 604 822-3150****FAX: 604 822-6339****URL1: http://www.physics.ubc.ca/cgi-bin/Job_Appl_Info.cgi****(Electronic Applications)****URL2: <http://www.phas.ubc.ca>****(Department Website)****Email Submission Address: jobs@physics.ubc.ca****Attention: Jeff Young, Head**

The Department of Physics & Astronomy at the University of British Columbia is seeking applications for several tenure track faculty positions. These positions are primarily intended to be at the Assistant Professor level, but applications for senior candidates will also be considered. Areas of particular interest are below, but outstanding candidates from any area of Physics and Astronomy will be considered.

2005-06 Biological Physics: Candidates are sought who will lead a vigorous research Program in theoretical, experimental or computational biophysics, with an emphasis on fundamental research questions that complement the existing strengths of our biological physics group. Areas of interest include, but are not limited to: molecular machines, interactions in signaling and differentiation, single molecule studies, and neuronal or molecular networks.

2005-07 Planetary Science/ Planetary Astronomy: UBC is expanding into the area of planetary sciences, led by the Physics and Astronomy and Earth and Ocean Sciences departments. Candidates with strong research records in studies of the formation/evolution of the solar system and planetary objects, either observationally or theoretically, are encouraged to apply.

2005-08 Theoretical quantum Information and Computation: Candidates are sought from any area related to quantum information, quantum computation, and quantum communication. Ability to interact with current departmental strengths in theoretical and experimental areas of decoherence and quantum noise, quantum optics with cold atoms, solid-state based

nanostructures and quantum materials would be an asset.

2005-09 Theoretical Particle Physics and Cosmology: Up to two positions are available in the general areas of particle theory, Astroparticle theory, and/or theoretical cosmology.

Candidates must have a PhD. Degree or equivalent, relevant postdoctoral experience, an outstanding research record and a strong interest in teaching at the undergraduate and graduate level.

The University of British Columbia hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply - however, Canadian citizens and permanent residents will be given priority.

Applicants are urged to submit online applications at http://www.physics.ubc.ca/Job_Appl_Info , making sure to select the correct category. A CV, publications list, and statements of research and teaching interests are required. 3 letters of reference may be submitted electronically to jobs@physics.ubc.ca , or sent by mail to:

Head Department of Physics and Astronomy University of British Columbia 6224 Agricultural Road Vancouver, B.C. V6T 1Z1, Canada

The deadline for receipt of applications is November 15, 2005.

No. 21933

Assistant Research Scientist in Theoretical Astrophysics

THE JOHNS HOPKINS UNIVERSITY

Department of Physics and Astronomy

3400 North Charles Street

Baltimore, MD 21218

USA

Tel: 410-516-7926

FAX: 410-516-5096

Email Submission Address: jhk@pha.jhu.edu

Attention: Professor Julian Krolik, Professor of Physics and Astronomy

Applications are invited for an assistant research scientist in theoretical astrophysics at the Center for Astrophysical Sciences in the Department of Physics and Astronomy of the Johns Hopkins University. Working with Professor Julian Krolik and his collaborators, the successful candidate will participate in a program investigating the basic physics of accretion onto black holes. This effort spans the range from large-scale numerical simulations to phenomenology.

The starting date for this position is flexible, but could be as early as January, 2006. Officially it must be renewed annually, but it is intended to extend for three years.

To apply, please send a CV including a list of publications, a statement of research interests, and three letters of recommendation to Prof. Julian Krolik, Department of Physics and Astronomy, Johns Hopkins University, Baltimore MD 21218 USA no later than November 1, 2005. The Johns Hopkins University encourages applications from women and minority

candidates. AAE/EOE.

No. 21934**Postdoctoral Fellowship in High Mass Star Formation at High Angular Resolution
SMITHSONIAN ASTROPHYSICAL OBSERVATORY****60 Garden St.****MS 42****Cambridge, MA 02138****USA****Tel: 617-496-7547****FAX: 617-495-7345****Email Submission Address: ehumphreys@cfa.harvard.edu****Email Inquiries: ehumphreys@cfa.harvard.edu, lgreenhill@cfa.harvard.edu*****Attention: Dr. Liz Humphreys***

Applications are invited for a postdoctoral fellowship in high-mass star formation at the Smithsonian Astrophysical Observatory of the Harvard Smithsonian Center for Astrophysics. The fellow will work with VLBI groups in the study of 3D gas motions close to high-mass young stellar objects, in order to characterize accretion/outflow processes and the role of magnetic fields. One long range goal will be creation of visualization tools and a movie, using spectral-line time-series images, of a YSO in Orion. Other star formation projects are possible, depending on appointee interest and experience. Use of the VLBA, VLA, MERLIN, and Smithsonian facilities such as the Submillimeter Array (SMA) and optical/infrared telescopes will be viewed with particular interest.

Candidates must possess a PhD in astrophysics or a related field. They must have demonstrated experience in radio interferometry and associated analysis software. Experience in the reduction of VLBI data is especially desirable. Familiarity with UNIX/LINUX, FORTRAN/C, and scripting is necessary. The position will be offered for one year, renewable for up to three, contingent on performance and funding. The stipend is \$50,000 plus health insurance, and the start date is June 1, 2006. Later starts may be arranged. Further information can be obtained via email from Drs. Lincoln Greenhill and Liz Humphreys. Candidates should submit via email a CV, bibliography, preferred start date, and statement of research accomplishments and interests on or before December 1, 2005. Three letters of recommendation should also be received by Dr. Humphreys before this date as well. AAE/EOE

No. 21935**Carnegie Postdoctoral Research Fellowship in Astronomy****CARNEGIE OBSERVATORIES****813 Santa Barbara Street****Pasadena, CA 91101****USA****Tel:****FAX: 626-304-0266****URL1: <http://www.ociw.edu>****Email Submission Address: cfellow@ociw.edu****Email Inquiries: cfellow@ociw.edu**

Attention: Dr. John Mulchaey, Chair, Fellowship Committee

We invite applications for The Carnegie Fellowship at the Carnegie Observatories in Pasadena, California, to begin 1 September 2006.

The fellowship is intended to encourage long-term research in observational or theoretical astronomy and/or instrumentation. We are particularly interested in applicants who have received their Ph.D. degree within the past three years. Fellowships are awarded for one year and may be renewed for two additional years. The successful applicant must have completed the Ph.D. requirements before assuming the fellowship.

Carnegie observing facilities include the two 6.5-meter Magellan telescopes, the 2.5-meter du Pont telescope and the Swope 1.0-meter telescope all at Las Campanas, Chile. Fellows will have access to these facilities on the same basis as the scientific staff. The Carnegie Fellowship provides ample support for observing, travel, computing, and publications.

The application should include a curriculum vitae, bibliography, a brief essay describing the applicant's current research, and a research proposal based on the facilities available at the Observatories. In addition, applicants should arrange for three letters of reference to be sent directly to the above address by the deadline. **APPLICANTS ARE STRONGLY ENCOURAGED TO ATTEND THE WINTER AAS MEETING FOR INTERVIEWS**, as these play an important role in the selection. An application package and a description of the facilities at the Observatories may be obtained at <http://www.ociw.edu/>. E-mail inquiries may be sent to Dr. John Mulchaey at cfellow@ociw.edu.

Applications, letters of reference, and all supporting material must be received before 1 December 2005.

All applications for the Carnegie-Princeton fellowship will also be considered for this fellowship. Applicants may submit a separate research statement tailored for the Carnegie fellowship if they chose. However, it is not necessary to submit other application materials in duplicate. In particular, only one copy of the reference letters is required.

The Carnegie Institution of Washington is an Equal Opportunity Employer.

No. 21936**Joint Postdoctoral Fellowship Carnegie Observatories and Princeton University****CARNEGIE OBSERVATORIES****813 Santa Barbara Street****Pasadena, CA 91101****Tel: 626-304-0241****FAX: 626-304-0266****URL1: <http://www.ociw.edu>****Email Submission Address: c-pfellow@ociw.edu****Email Inquiries: c-pfellow@ociw.edu****Attention: Ms. B. Lynn**

Joint Postdoctoral Fellowship Carnegie Observatories and Princeton University

The Observatories of the Carnegie Institution of Washington and the Department of Astrophysical Sciences of Princeton University invite applications for a four-year postdoctoral fellowship in astronomy, to begin in September, 2006. The Fellow is expected to work for two years in Princeton and two years at the main offices of the Observatories in Pasadena. The timing of these stays will be negotiated by the Fellow and the host institutions once the position is offered.

The Carnegie-Princeton Fellow is expected to carry out original research in any area of astronomy or astrophysics, either independently or in collaboration with staff, faculty or students at the host institutions. The principal selection criteria will be outstanding research accomplishments and promise of future achievement, although preference will be given to researchers working in those areas in which Carnegie and Princeton have active research interests.

The Fellow will have access to all of the resources and facilities of both institutions. In particular, Carnegie operates the Las Campanas Observatory in Chile, which includes the twin 6.5-meter Magellan telescopes, the 2.5-meter Dupont and 1.0-meter Swope telescopes, and provides an excellent environment for observational astrophysics and cosmology. The Department of Astrophysical Sciences at Princeton is a major partner in the Apache Point Observatory, the Sloan Digital Sky Survey, the Wilkinson Microwave Anisotropy Probe and the Atacama Cosmology Telescope, and, together with research groups in the Physics Department and the nearby Institute for Advanced Study, offers an unparalleled environment for research in theoretical astrophysics and cosmology. The fellowship provides support for observing, travel, computing and publications, and the observing facilities will be accessible for the entire duration of the fellowship.

Further information on the host institutions is available at <http://www.ociw.edu/> and <http://www.astro.princeton.edu> .

Applicants should send a curriculum vitae, bibliography, and research plan, and arrange for three letters of recommendation to be sent to BOTH the Observatories and to Princeton by 1 December 2005. The research plan should address how the applicant intends to use the resources and facilities available at both host institutions. Preference for a starting host institution and the proposed timing of the stays at each institution should also be stated. Selection of the successful candidate will be made by a joint Carnegie-Princeton committee.

All applicants will automatically be considered for all postdoctoral positions in the Astrophysical Science department at Princeton and for the Carnegie Fellowship at The Observatories; however, they should clearly state in the cover letter that they wish to be considered for the Carnegie-Princeton Fellowship. Applications should be sent to both of the following addresses:

Ms. B. Lynn, Carnegie Observatories, 813 Santa Barbara St., Pasadena, CA 91101

Ms. M. Lipman, Dept. of Astrophysical Sciences, Peyton Hall, Princeton University, Princeton NJ 08544-1001

The Carnegie Institution of Washington is an Equal Opportunity Employer. Princeton University is an Equal Opportunity / Affirmative Action Employer.

For questions or additional information, please send email to c-pfellow@ociw.edu and/or postapp@astro.princeton.edu. For information about applying to Princeton, please link to: <http://web.princeton.edu/sites/dof/ApplicationsInfo.html>. For additional information on the fellowship program at Carnegie, please visit: <http://www.ociw.edu/ociw/fellow/>

No. 21937**Postdoctoral position in Computational Astrophysics****INSTITUTE FOR COMPUTATIONAL ASTROPHYSICS - SAINT MARY'S UNIVERSITY****Saint Mary's University****923 Robie Street****Halifax, Nova Scotia B3H 3C3****Canada****Tel: 902-420-5105****FAX: 902-496-8218****URL1: <http://www.ica.smu.ca>****Email Submission Address: jadams@ap.smu.ca****Email Inquiries: jadams@ap.smu.ca*****Attention: Ms. Julee Adams, Assistant to the Director***

Applications are solicited for postdoctoral or research associate positions in the Institute for Computational Astrophysics (ICA) at Saint Mary's University. Two new openings are expected to become available no earlier than February 1, 2006. Any appointment would initially be for two years with possible renewals. The successful candidate will hold a Ph.D. in astronomy, astrophysics, or physics, and will be free to pursue his or her own research agenda in any area of computational astrophysics as well as take part in ICA research projects. Teaching opportunities for additional remuneration may also be made available if desired.

The ICA has five full-time faculty members including two Canada Research Chairs. There are currently two postdoctoral and ten graduate student members. Current areas of ICA research and interests include stellar structure, evolution, pulsation, and hydrodynamics; MHD outflows and collapse; non-LTE stellar atmospheres; and planetary formation and dynamics. A common theme for all areas is complex and often multi-dimensional numerical simulations.

The ICA operates a 48 node Beowulf cluster and a ten processor Sun Enterprise 4500 for the research use of its members in addition to individual workstations. The ICA plays a major role in ACEnet, the regional academic computing consortium for Atlantic Canada (see www.ace-net.ca), and will have access to all its facilities and personnel resources as they become available over the next few months. This will include significant visualization capabilities including a data cave located at Saint Mary's. Arrangements can be made for access to other high performance computing through the other consortia in Canada as needed.

Applicants should submit curriculum vitae, list of publications, statement of research interests, and have three letters of reference sent to the above address by 28 October 2005. The starting date is at the discretion of the candidate and the ICA; candidates are encouraged to suggest an approximate starting date. While this advertisement is directed in the first instance to Canadian citizens and permanent residents, all qualified candidates are strongly encouraged to apply. Saint Mary's University is committed to the principles of employment equity.

No. 21938**Postdoctoral Research Associate in Computational Astrophysics****PRINCETON UNIVERSITY****Dept. of Astrophysical Sciences****Peyton Hall; Ivy Lane****Princeton, NJ 08544****USA****Tel: 609-258-3803****FAX: 609-258-1020****URL1: <http://www.astro.princeton.edu>****(Department website)****Email Submission Address: postapp@astro.princeton.edu****Email Inquiries: postapp@astro.princeton.edu*****Attention: M. Lipman***

The Department of Astrophysical Sciences, Princeton University, invites applications for a research postdoctoral position, starting any time but no later than September 1, 2006. An eligible applicant should have a Ph.D. in astronomy, physics or computer science. The successful applicant will work with Dr. Renyue Cen in fields closely related to cosmological hydrodynamic, radiation-hydrodynamic, and magnetohydrodynamic simulations. The successful candidate is also expected to have had substantial experience with programming languages (Fortran, C, C++, ...) widely used in scientific computing. We have excellent local computing facilities as well as access to larger supercomputing facilities.

Appointments are for one year, renewable annually based on satisfactory performance, for a total of up to three years. Applicants should send a curriculum vitae, bibliography and statement of research interests, and arrange to have three letters of recommendation sent by December 1, 2005, to M. Lipman, Princeton University, Department of Astrophysical Sciences, Peyton Hall, Princeton, NJ 08544. All applications will automatically be considered for all postdoctoral fellowships available in the department, but please state which positions you are interested in. For information about applying to Princeton, please link to:
<http://web.princeton.edu/sites/dof/ApplicantsInfo.htm> EEO/AAE

No. 21939**Lyman Spitzer, Jr. Postdoctoral Fellowship in Astrophysics****PRINCETON UNIVERSITY****Dept. of Astrophysical Sciences****Peyton Hall; Ivy Lane****Princeton, NJ 08544****USA****Tel: 609-258-3803****FAX: 609-258-1020****URL1: <http://www.astro.princeton.edu>****Email Submission Address: postapp@astro.princeton.edu****Email Inquiries: postapp@astro.princeton.edu*****Attention: M. Lipman***

The Department of Astrophysical Sciences, Princeton University, invites applications for the Lyman Spitzer, Jr. Postdoctoral Fellowship in Astrophysics. The Spitzer Fellow is expected to carry out original research in astrophysics, independently or in collaboration with Princeton faculty, postdoctoral fellows or students. The fellowship is intended primarily to support researchers in theoretical astrophysics, but exceptional candidates in observational astronomy are encouraged to apply. The fellowship includes a substantial annual research fund.

Princeton astronomers with research interests in theoretical astrophysics include Neta Bahcall (large-scale structure, clusters of galaxies), Renyue Cen (cosmological simulations), Bruce Draine (interstellar dust, interstellar medium), Jeremy Goodman (dynamics, gamma-ray bursts, scintillation), J. Richard Gott (cosmology, general relativity), James Gunn (cosmology), Russell Kulsrud (primordial magnetic fields, plasma physics), Jeremiah P. Ostriker (formation and evolution of large-scale structure), Bohdan Paczynski (gravitational microlensing, gamma ray bursts), David Spergel (CMB, particle astrophysics, cosmology, galaxy dynamics, planets), James Stone (MHD, star formation), Scott Tremaine (planetary and galaxy dynamics), and 15-20 postdoctoral fellows and research staff. There are also strong research groups in the Physics Department and at the nearby Institute for Advanced Study. The expected starting date is 1 September 2006.

Appointments are for one year, renewable annually based on satisfactory performance, for a total of up to three years. Applicants should send a curriculum vitae, bibliography and statement of research interests, and arrange to have three letters of recommendation sent to the above address, by December 1, 2005. All applications will automatically be considered for all postdoctoral fellowships available in the department, but please state which positions you are interested in. For information about applying to Princeton, please link to:
<http://web.princeton.edu/sites/dof/ApplicantsInfo.htm> EEO/A&E

No. 21940

Southern Cosmology Survey Postdoctoral Fellowships

PRINCETON UNIVERSITY

Dept. of Astrophysical Sciences

Peyton Hall; Ivy Lane

Princeton, NJ 08544

USA

Tel: 609-258-3803

FAX: 609-258-1020

URL1: <http://www.astro.princeton.edu>

Email Submission Address: postapp@astro.princeton.edu

Email Inquiries: postapp@astro.princeton.edu

Attention: M. Lipman

We invite applications for 3-4 postdoctoral research associate positions starting September 1, 2006 for a multi-institutional postdoctoral program funded by the NSF Partnership for International Research and Education (PIRE). The candidates should be exceptional experimental, observational or theoretical cosmologists. The postdoctoral fellows will be based at Rutgers University, The University of Pennsylvania and Princeton University and will work with collaboration members at these US institutions as well as at Pontificia Universidad

Catolica (Chile) and the University of KwaZulu-Natal (South Africa). We seek candidates with proposed research programs based on SZE data from the Atacama Cosmology Telescope (www.hep.upenn.edu/act), optical data from SALT and other ground-based telescopes with a scientific focus on fundamental cosmology, or related theoretical or observational studies of galaxy formation and evolution and galaxy clusters. Possible projects include experimental and theoretical work on the CMB, secondary CMB effects, clusters of galaxies, galaxy evolution, stellar populations at high redshift, and weak lensing. It is expected that at least one successful applicant will be based at each of the three US institutions, which are located within an hour of each other, allowing for frequent collaborations and meetings. The three US universities encompass a body of approximately 80 postdoctoral researchers, faculty and graduate students working in cosmology and extra-galactic astronomy. Further, there will be a very strong collaboration with our South African (University of KwaZulu-Natal) and Chilean (Universidad Catolica) partners in the PIRE program. An annual summer school is being organized in each of the hemispheres and long stays in Chile and South Africa will be supported and strongly encouraged. There will be significant funds for travel. Appointments are for one year, renewable annually based on satisfactory performance, for a total of up to three years. Applicants should send a curriculum vitae, bibliography and statement of research interests, and arrange to have three letters of recommendation sent to Mindy Lipman, Department of Astrophysical Sciences, Princeton University, Peyton Hall, Princeton, NJ 08544 by December 1, 2005. Applications will automatically be considered for all postdoctoral fellowships available in the Astrophysical Sciences department at Princeton. For further inquires contact: Jack Hughes (jph@physics.rutgers.edu), David Spergel (dns@astro.princeton.edu) and Raul Jimenez (raulj@physics.upenn.edu). For further information about applying to Princeton, please link to: <http://web.princeton.edu/sites/dof/ApplicantsInfo.htm>. EEO/AE

No. 21941**Astronomical Software Scientist****PRINCETON UNIVERSITY****Dept. of Astrophysical Sciences****Peyton Hall; Ivy Lane****Princeton, NJ 08544****USA****Tel: 609-258-3803****FAX: 609-258-1020****URL1: <http://www.astro.princeton.edu>****(Department website)****URL2: <http://www.sdss.org>****(SDSS website)****Email Submission Address: postapp@astro.princeton.edu****Email Inquiries: postapp@astro.princeton.edu*****Attention: M. Lipman***

The Department of Astrophysical Sciences, Princeton University, expects to have one or more positions in the area of software development and support for the acquisition, reduction, analysis, and testing of photometric and spectroscopic data obtained by the Sloan Digital Sky Survey, a multi-institutional project to carry out an imaging and redshift survey, and other possible current and future large astronomical instrumentation projects. SDSS measures the

sky at five bands, u,g,r,i, and z, using a large format CCD array, and spectra are obtained by a pair of multi-fiber spectrographs. The data reduction is done by a series of automated pipelines which calibrate and correct the data, find and measure objects, and produce digital catalogues, images and spectra for science analysis. We expect to carry out development, testing and support work in the following areas: running the pipelines; efficient algorithms for object measurement; quality analysis; co-addition of multiple imaging data; comparison and subtraction of images from multiple passes across the sky; automated searches for variable objects; algorithms to find rapidly varying or fast moving objects; global photometric calibration; spectrophotometry; and determination of stellar parameters (temperature, metallicity, spectral type, gravity, and radial velocity). Much of this work will be in support of SDSS-II, whose science goals include the studies of large scale cosmological structure, the kinematic and chemical structure and merger history of the Milky Way galaxy, and the characterization of supernova light curves in the range $z = 0.05 - 0.35$.

We seek persons with knowledge of optical astronomy at faint levels, CCD data, handling of large data sets, efficient automated data reduction, image analysis, and stellar spectroscopic analysis. The work includes algorithm development; evaluating the scientific performance of pipeline code; writing robust, efficient code (primarily on Unix platforms in C); and running and maintaining pipeline code. Experience in TCL, C++ and software engineering practices and/or in instrumentation and optical telescope hardware and software is desirable. The appointment (s) will be made to the scientific or technical staff at a level and salary commensurate with experience, for an initial period of one year which can be renewed for one or more years depending on satisfactory performance and availability of funding. The candidate should hold a Ph.D. degree in (preferably) astrophysics, physics, mathematics or computer science.

Please send your vita, list of publications, detailed description of relevant experience, and arrange to have three letters of recommendation sent to Mindy Lipman Department of Astrophysical Sciences Princeton University Peyton Hall Princeton, NJ 08544 USA

We will begin to evaluate applications on December 1, 2005 and will accept them thereafter until suitable candidates are found. These positions are offered subject to the availability of funding. Applications received by December 1 will automatically be considered for all postdoctoral fellowships available in the department. Further information about the SDSS is available via <http://www.sdss.org> or by email from gk@astro.princeton.edu For further information about applying to Princeton, please link to: <http://web.princeton.edu/sites/dof/ApplicantsInfo.htm> EEO/AA

No. 21942

Postdoctoral Prize Fellowships in Theoretical Physics or Astrophysics

CALIFORNIA INSTITUTE OF TECHNOLOGY

1200 California Blvd.,

MC: 103-33

Pasadena, Ca 91125

USA

Tel: (626) 395-3821

FAX: (626) 564-0267

Email Submission Address: lbell@caltech.edu

Attention: Louise Bell, Administrative Assistant

CALIFORNIA INSTITUTE OF TECHNOLOGY INVITES APPLICATIONS AND NOMINATIONS FOR POSTDOCTORAL PRIZE FELLOWSHIPS IN THEORETICAL PHYSICS OR ASTROPHYSICS A number of Prize Fellowships at the Postdoctoral Scholar level will be awarded on the basis of an international competition. They are to begin in Fall 2006. The Postdoctoral Scholar appointments are for a three-year duration, carry an annual stipend and/or salary combination totaling \$51,000, and offer a research expense fund of \$4,000 per year.

This Fellowship program has been established to offer scientists, typically within a few years of receipt of their Ph.D., the best possible opportunity to develop their talents. Research will be encouraged in areas in which Caltech's faculty is currently active:

Astrophysics Computational Physics Condensed Matter Physics Elementary Particle Physics Gravitational Physics Mathematical Physics Nuclear Physics Quantum Optics Cosmology

Materials in support of an application or nomination should be sent to THEORETICAL PHYSICS AND THEORETICAL ASTROPHYSICS FELLOWSHIPS, mail code 103-33, California Institute of Technology, Pasadena, CA 91125, to arrive by DECEMBER 1, 2005. These materials should include curriculum vitae with email address and with citizenship indicated, publication list, with refereed publications clearly marked, and a description of the anticipated research program. Candidates are strongly encouraged to contact relevant Caltech faculty in advance to discuss the proposed research program. The candidate or nominator is requested to ensure that at least three letters of recommendation are sent directly to Caltech. Fellowship candidates will automatically be considered for other available postdoctoral positions in their fields of interest. Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans and Disabled Persons are encouraged to apply.

No. 21943

Postdoctoral Prize Fellowships in Experimental Physics or Astrophysics

CALIFORNIA INSTITUTE OF TECHNOLOGY

1200 California Blvd.

MC: 103-33

Pasadena, Ca 91125

USA

Tel: (626) 395-3821

FAX: (626) 564-0267

Email Submission Address: lbell@caltech.edu

Attention: Louise Bell, Administrative Assistant

CALIFORNIA INSTITUTE OF TECHNOLOGY INVITES APPLICATIONS AND NOMINATIONS FOR POSTDOCTORAL PRIZE FELLOWSHIPS IN EXPERIMENTAL PHYSICS OR ASTROPHYSICS The Division of Physics, Mathematics and Astronomy offers a number of Prize Fellowships at the Postdoctoral Scholar level in experimental physics or astrophysics. In the case of astrophysics, only candidates whose focus is primarily instrumental (not purely observational) will be considered. These Fellowships are to begin in Fall 2006 and are for a three year duration. They carry an annual stipend and/or salary combination totaling \$51,000 and offer a research expense fund of \$4,000 per year.

This fellowship program has been established to offer scientists, typically within a few years after receipt of their Ph.D., the opportunity to pursue new and innovative experimental research. It is expected that this research will require the support and use of facilities of one of the established experimental groups at Caltech. Currently, Caltech has groups working in:

Astronomical Detector Development Atomic Physics Condensed Matter Physics Gravitational Physics High Energy Astrophysics High Energy Physics Infrared & Submillimeter Astronomy Low Energy Particle Physics Neurobiology Nuclear Physics Observational Cosmology Quantum Optics Radio Astronomy Ultraviolet Astrophysics

Materials in support of an application or nomination should be sent to EXPERIMENTAL PHYSICS AND EXPERIMENTAL ASTROPHYSICS FELLOWSHIPS, mail-code 103-33, California Institute of Technology, Pasadena, CA 91125, to arrive by DECEMBER 1, 2005. These materials should include curriculum vitae with email address and with citizenship indicated, publication list, with refereed publications clearly marked, an indication of the group with which the candidate would most likely be associated, and a description of the anticipated research program. Candidates are strongly encouraged to contact relevant Caltech faculty in advance to discuss the proposed research program. The candidate or nominator is requested to ensure that at least three letters of recommendation are sent directly to Caltech. Fellowship candidates will automatically be considered for other available postdoctoral positions in their fields of interest. Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans and Disabled Persons are encouraged to apply.

No. 21944

Cardiff SZ / CMB data analysis PDRA

CARDIFF UNIVERSITY

School of Physics and Astronomy

5, The Parade

Cardiff, Wales CF24 3YB

UK

Tel: 44-(0)29-875526

FAX: 44-(0)29-874056

URL1: <http://www.astro.cf.ac.uk/groups/instrumentation/>

Email Submission Address: gear@astro.cf.ac.uk

Email Inquiries: gear@astro.cf.ac.uk

Attention: Prof. W.K. Gear, Professor

The Astronomy Instrumentation Group in Cardiff require a Post Doctoral researcher to work on observations and the analysis and scientific exploitation of data from the Bolocam instrument on the Caltech 10-m telescope, Aztec on the 15-m James Clerk Maxwell Telescope and the 'BLAST' balloon experiment. Particular emphasis in the science exploitation will be towards Sunyaev-Zeldovich effect survey data. Depending on the experience and interests of applicants the opportunity also exists to take part in analysis of data from the 'QUaD' (QUEST at DASI) CMB polarization experiment, and other projects in which the group are participating.

The position is available from Oct 2005 and the appointment will for 2 years in the first instance with the possibility of renewal, subject to funding. A Phd (awarded or submitted) in a relevant subject is essential and experience in either millimetre-submillimetre observing and data

analysis and/or SZ/CMB science is highly desirable.

Cardiff has the largest group of millimetre/submillimetre astronomers in the UK and is involved in many other projects other than those mentioned here. Further details on research activity may be found at <http://www.astro.cf.ac.uk/groups/instrumentation/> .

Informal enquiries may be made to Professor Walter Gear (gear@astro.cf.ac.uk) or Dr Phil Maukopf (philip.maukopf@astro.cf.ac.uk). Closing date for applications is sept 30th 2005.

No. 21945

Assistant Professor

PRINCETON UNIVERSITY

Dept. of Astrophysical Sciences

Peyton Hall; Ivy Lane

Princeton, NJ 08544

USA

Tel:

FAX: 609-258-1020

URL1: <http://www.astro.princeton.edu>

(Department website)

Attention: Professor Scott Tremaine, Chair

Princeton University is searching for a tenure-track Assistant Professor in the Department of Astrophysical Sciences, to begin in September 2006. The primary selection criteria will be research achievement, promise, and breadth in theoretical astrophysics. The expected abilities to teach and to supervise student research are also important criteria. Information on departmental resources and research programs can be found at <http://www.astro.princeton.edu> , or by directly contacting department faculty.

Candidates should send their curriculum vitae, bibliography, and a three-page description of past research and future plans to Professor S. Tremaine, Chair, Department of Astrophysical Sciences, Princeton University, Peyton Hall, Princeton, NJ 08544-1001 USA. They should also arrange for at least three referees to send letters of recommendation to the same address. Applications will be accepted until the position is filled but no later than January 1, 2006.

Princeton University is an equal opportunity/affirmative action employer. For information about applying to Princeton and how to self-identify, please link to <http://web.princeton.edu/sites/dof/ApplicantsInfo.htm>

No. 21946

POSTDOCTORAL POSITION, ACTIVE GALAXIES

PENN STATE UNIVERSITY

Dept. of Astronomy & Astrophysics

525 Davey Lab.

University Park, PA 16802

USA

Tel: 814 865 3509

FAX: 814 863 2842

URL1: <http://www.astro.psu.edu>
Email Inquiries: niel@astro.psu.edu

Attention: Dr. W. N. Brandt, Professor

POSTDOCTORAL POSITION, ACTIVE GALAXIES, PENN STATE: Applications are invited for a position which could begin as early as January 2006 (the starting date has some flexibility). The successful applicant will work with Prof. W.N. Brandt, Prof. D.P. Schneider, and collaborators on the analysis of active-galaxy samples from Chandra, XMM-Newton, Swift, the Sloan Digital Sky Survey (SDSS), and other facilities. Research duties will involve the planning and implementation of observing programs, the analysis of active-galaxy spectral/variability/imaging data, and the publication of scientific results. A PhD is required, and experience working with X-ray data and/or the SDSS would be an advantage. The position is for one year initially with the possible extension of up to two more years.

Information about the Department can be found at <http://www.astro.psu.edu>. Penn State has a significant community of active-galaxy researchers and is the PI institution for the ACIS CCD camera on Chandra. Applications including CV, publications list, statement of research interests (1 page), and two professional reference letters should be sent to W.N. Brandt at the above address by November 15, 2005. Questions should be directed to W.N. Brandt at 814-865-3509 or niel@astro.psu.edu. Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

No. 21947

Faculty Positions in Astronomy

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

Department of Physics and Astronomy

136 Frelinghuysen Road

Piscataway, NJ 08854-8019

USA

Tel: 732 445 2531

FAX: 732 445 8187

URL1: <http://www.physics.rutgers.edu/ast>

(Group website)

Email Submission Address: nancy@physics.rutgers.edu

Attention: Nancy DeHaan, Astronomy Search Committee

The Department of Physics and Astronomy at Rutgers University solicits applications for multiple tenure-track or tenured astronomy faculty positions to begin Fall 2006. We welcome applications at both the junior and senior levels from both observers and theorists whose research interests broaden, yet contact with, those of the current faculty group. For one appointment we are particularly seeking a theoretical cosmologist with interests in the early universe and/or the CMB.

Rutgers University has a 10% share in SALT, an 11-meter optical telescope in South Africa, which has recently become operational, and has access to other telescopes at SAAO. Current astrophysics research interests at Rutgers include X-ray astrophysics, cosmology, dark matter,

galaxy dynamics and evolution, globular clusters, gravitational lensing, and instrumentation. Members of the group are involved in major collaborative projects, including the Atacama Cosmology Telescope, the Deep Lens Survey, CASTLES, Suzaku, and ALMA. The Department is also strengthening a particle phenomenology group. More information about astrophysics research and resources at Rutgers can be found at the group website.

Interested persons should send a CV with a complete publication list, a short summary of their research interests, and the names of three people who can be contacted for letters of recommendation to the Astronomy Search Committee, c/o Nancy DeHaan, preferably before November 30, 2005. Rutgers University is an Equal Opportunity/Affirmative Action employer. Applications from women and members of minority groups are particularly welcome.

No. 21948**Astronomer in Nautical Almanac Office
UNITED STATES NAVAL OBSERVATORY**

Tel:

URL1: http://aa.usno.navy.mil/nao_job.html*(Additional job information)*URL2: <http://www.opm.gov/qualifications/SEC-IV/B/GS1300/1330.HTM>*(GS-1330 standards)*URL3: <http://www.opm.gov/qualifications/SEC-IV/A/GS-PROF.HTM#table>*(GS-07 standards)*Email Submission Address: seu@usno.navy.milEmail Inquiries: seu@usno.navy.mil***Attention: Sean Urban***

The United States Naval Observatory (USNO) has an opening for a full-time, entry-level astronomer in the Nautical Almanac Office of the Astronomical Applications Department. The employee will participate in the production of the USNO's annual publications, The Astronomical Almanac, The Nautical Almanac, The Air Almanac, and Astronomical Phenomena. Following on-the-job training, the duties will include the complete cycle of production from initial background research, through calculation and verification of the data, to production of the reproducible copy (print and/or CD-ROM). Additionally, the employee will participate in other projects as assigned within the Astronomical Applications Department, such as developing new scientific software and new electronic publications and data services.

The position is located at USNO in Washington DC. The position is a GS-07/09/11/12 ladder and will be filled at a GS-07 or GS-09 level. Starting salary is \$35,452 - \$49,145 with promotion potential to \$81,747. Applicants must meet the qualification standards for the GS-1330 Series GS-07 level (see <http://www.opm.gov/qualifications/SEC-IV/B/GS1300/1330.HTM> and <http://www.opm.gov/qualifications/SEC-IV/A/GS-PROF.HTM#table>). Resumes will be accepted by e-mail at seu@usno.navy.mil through September but submissions by September 15, 2005 are encouraged. Resumes should include knowledge and experience in general astronomy, positional astronomy, use of typesetting software (e.g., LaTeX, TeX, Adobe Acrobat), scientific programming (using Fortran, C, or C++), use of graphics software (e.g. IDL, Photoshop), and Web markup languages (e.g. HTML, XML). Additional information can be found at http://aa.usno.navy.mil/nao_job.html. Questions can be addressed to Sean Urban at seu@usno.navy.mil or by phone at (202) 762-1496; e-mail is preferred.

No. 21949
Staff Scientist
CALIFORNIA INSTITUTE OF TECHNOLOGY
770 So. Wilson Ave.
MS 100-22
Pasadena, CA 91125
USA
Tel:

Attention: Mary Ellen Barba, Supervisor of Staff Operations

The NASA Herschel Science Center (NHSC), located at the Infrared Processing and Analysis Center (IPAC), seeks to fill a Staff Scientist position. The successful applicant will work with other NHSC scientists and engineers and their counterparts in Europe to develop tools and expertise in the European Space Agency's Herschel Space Observatory mission in order to support the US astronomical community using Herschel. Herschel, a far-infrared/submillimeter observatory, is currently scheduled to launch by ESA in mid-2007.

Minimum requirements for the position: PhD in physics, astronomy, or a related discipline; three years or more of work-related job experience with a record of scientific publications; and the ability and willingness to travel to Europe on a regular basis. Applicants with experience in science planning and data analysis for space observatories, and mid/far IR and sub-millimeter astronomy will be given preference. Applicants whose research interests include observational infrared, sub-millimeter and/or space-based astrophysics are highly desirable. Please send CV and names/contact information only of three references. The deadline for receipt of application material is October 1st.

Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

No. 21950
Postdoctoral Research Positions in High Energy and Relativistic Astrophysics
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Center for Theoretical Astrophysics
1110 West Green Street
Urbana, IL 61801-3080
USA
Tel: 217.333.1590
FAX: 217.244.7559
Email Submission Address: thorman@uiuc.edu
Email Inquiries: thorman@uiuc.edu

Attention: Linda Thorman, Staff Secretary V

Applications are invited for Postdoctoral Research positions in the high energy and relativistic astrophysics group in the Physics Department beginning in January or August 2006 or at a mutually agreed date. Preference will be given to individuals with experience in X-ray and gamma-ray astrophysics; general relativity and the physics of neutron stars and black holes; or

magnetohydrodynamics, radiation transport, and accretion. Stipends for the 2006-2007 year will be approximately \$44,200. Applicants should submit a curriculum vitae, list of publications, and a brief description of research interests, and arrange for three supporting letters to be sent to Postdoctoral Positions, Center for Theoretical Astrophysics, 1110 W. Green Street, Urbana, IL 61801-3080 by November 10, 2005, to assure full consideration (contact Linda Thorman thorman@uiuc.edu or 217.333.1590). UIUC is an equal opportunity/affirmative action employer.

No. 21951**Fortner Research Fellowships in Theoretical Astrophysics
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN****Fortner Research Fellowships****1110 West Green Street****Urbana, IL 61801-3080****USA****Tel: 217.333.1590****FAX: 217.244.7559****Email Submission Address: thorman@uiuc.edu****Email Inquiries: thorman@uiuc.edu*****Attention: Linda Thorman, Staff Secretary V***

Applications are invited for Fortner Postdoctoral Research Fellowships to begin in January or August 2006 or at a mutually agreed date. This fellowship program has been established to provide outstanding young theoretical astrophysicists with an opportunity to pursue forefront research. Only applicants who will have received their Ph.D. by the time they would take up the position are eligible. Preference will be given to individuals with experience in high-energy or relativistic astrophysics; general relativity; hydrodynamics, radiation transport, and accretion; the physics of neutron stars and black holes; the structure and evolution of galaxies; or cosmology. Appointments will be for two years, with renewal for a third year likely. Stipends for the 2006-2007 year will be approximately \$52,000. An annual research budget of \$10,000 will be available for each Fellow for travel and other research expenses. Applicants should submit a curriculum vitae, list of publications, and brief description of research interests, and arrange for three supporting letters to be sent to Fortner Research Fellowships, Center for Theoretical Astrophysics, 1110 W. Green Street, Urbana, IL 61801-3080 by November 10, 2005, to assure full consideration (contact: Linda Thorman, thorman@uiuc.edu or 217.333.1590). UIUC is an equal opportunity/affirmative action employer.

No. 21952**Postdoctoral Research Associate****CALIFORNIA INSTITUTE OF TECHNOLOGY****1200 E. California Blvd.****MS 220-6****Pasadena, CA 91125****USA****Tel: 626-395-8796****Email Submission Address: carey@ipac.caltech.edu or alberto@ipac.caltech.edu****Email Inquiries: carey@ipac.caltech.edu or alberto@ipac.caltech.edu**

Attention: Dr. Sean Carey

Applications are invited for two postdoctoral research associate positions in high mass star formation and/or the physics of the dense interstellar medium in the Galaxy at the Spitzer Science Center located on the California Institute of Technology campus in Pasadena, CA. The research associate will collaborate on studies of the star formation and the dense ISM using mid/far infrared observation obtained with Spitzer Space Telescope from the GLIMPSE (IRAC) and MIPS GAL (MIPS) surveys. MIPS GAL is a 24/70 micron survey of the Galactic plane led by Dr. Sean Carey at the Spitzer Science Center. Collection of the MIPS GAL survey data begins in October 2005 and finishes in April 2006. Successful candidates will be expected to assist with the validation of source catalogs and other aspects of survey data reduction. It is anticipated that the research associates will incorporate the survey data into their research projects. Applicants must have a PhD in astronomy prior to beginning the postdoctoral position. Preference will be given to candidates with a strong background and interest in Galactic star formation and/or the physics of the dense interstellar medium. Experience working with mid/far infrared observations, in particular using space-based instruments, would be considered an asset but is not a requirement. The appointment will be for two years beginning as early as November 2005. Salary will be \$45,000-\$50,000 commensurate with experience. Postdoctoral fellows have competitive access to observing facilities at Palomar Mountain, including the Hale 5-m Telescope. Interested individuals should send a letter of application, curriculum vitae, and names and contact information of three references by 15 October for full consideration. For more information, feel free to contact Dr. Carey and/or Dr. Noriega-Crespo. Caltech is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Veterans, and Disabled Persons are encouraged to apply.

No. 21953**Adaptive Optics Research Associate-Post Doc****CALIFORNIA ASSO. FOR RESEARCH IN ASTRONOMY(W.M. KECK OBSERVATORY)****65-1120 Mamalahoa Hwy.****Kamuela, HI 96743****USA****Tel:****FAX: 808-885-4464****URL1: <http://www.keckobservatory.org>****Email Submission Address: employment@keck.hawaii.edu****Email Inquiries: employment@keck.hawaii.edu****Attention: Adaptive Optics Research Associate**

The W. M. Keck Observatory, which operates the world's two largest optical/infrared telescopes, seeks an Adaptive Optics Research Associate to work at its headquarters in Waimea on the Big Island of Hawaii and on the summit of Mauna Kea. This is a temporary position up to two years in duration.

The successful candidate will be involved in the analysis, optimization and development of the Keck II and Palomar LGS AO systems; understanding the limitations of current LGS AO systems and partake in the development of next generation systems; participate in education and outreach programs sponsored by the Center for Adaptive Optics. It is anticipated that the

candidate will spend about 5 weeks a year at Caltech and Mount Palomar.

The requirements for this position include: A PhD level degree in engineering, optics, astronomy or physics or equivalent experience. Prior adaptive optics system development experience is highly desirable. Employment is conditional on successful completion of drug tests. Fax (808) 885-4464 or mail resumes, references, and salary history. EEO/M/F/D/V

No. 21956

Postdoctoral Positions and Visiting Fellowship Positions in Theoretical/Computational Astrophysics

THEORETICAL INSTITUTE FOR ADVANCED RESEARCH IN ASTROPHYSICS, AS AND NTHU, TAIWAN

Department of Physics, National Tsing Hua University

101, Sec. 2, Kuang-Fu Road

Hsin-Chu, Taiwan 300

ROC

Tel: +886-3-5742777

FAX: +886-3-5742679

URL1: <http://www.tiara.sinica.edu.tw>

(TIARA)

URL2: <http://www.asiaa.sinica.edu.tw>

(ASIAA)

URL3: <http://www.nthu.edu.tw>

(NTHU)

Email Submission Address: tiara-admin@tiara.sinica.edu.tw

Email Inquiries: tiara-admin@tiara.sinica.edu.tw

Attention: Ms. Rebecca Zheng, Office Administrator

The recently established Theoretical Institute for Advanced Research in Astrophysics (TIARA) is seeking applications to fill several postdoctoral positions and visiting fellowship positions in theoretical/computational astrophysics starting in Fall 2006 or earlier. Postdoctoral appointments are for an initial two year term and the visiting fellow appointments are for durations of two to twelve months.

TIARA is a joint collaboration between the National Tsing Hua University based in Hsinchu and Academia Sinica based in Taipei and has a mission to carry out research at the highest level and to establish a vigorous visitors program in theoretical astrophysics. Scientists connected with TIARA are M. Cai, H.K. Chang, D.Y. Chou, H. Shang, F. Shu, and C. Yuan in Taiwan and E. Chiang, D. Lai, Z.Y. Li, D. Lin, B.C. Low, C.P. Ma, U.L. Pen, and R. Taam in North America.

Present research at TIARA include investigations in the areas of Cosmology and Large Scale Structure, Galactic Dynamics, Star and Planet Formation, Solar Physics, High Energy/Relativistic Astrophysics and Computational Fluid Dynamics and Magnetohydrodynamics. The successful candidates will also have the opportunity for collaborations with scientists in the ongoing observational programs (SMA, AMiBA, TAOS projects within the Academia Sinica Institute of Astronomy and Astrophysics (<http://www.asiaa.sinica.edu.tw>)). An annual budget for research expenses will be provided.

Applicants should submit a curriculum vita, a brief summary of research and future research plans, and arrange for three letters of recommendation to be sent to Ms. Rebecca Zheng, TIARA Positions, at the above address. We encourage e-mail submissions to the above email address.

No. 21959
Astronomical Research Fellow
SOUTH AFRICAN ASTRONOMICAL OBSERVATORY
P O Box 9
Observatory
Cape Town, Western Cape 7935
South Africa
Tel: 021 447 0025
FAX: 021 447 3639
URL1: <http://www.sao.ac.za>
(South African Astronomical Observatory)
URL2: <http://www.salt.ac.za>
(Southern African Large Telescope)
Email Submission Address: linda@sao.ac.za
Email Inquiries: linda@sao.ac.za

Attention: Linda Tobin, Personnel Officer

ASTRONOMICAL RESEARCH FELLOW

Applications are invited for a postdoctoral research fellowship at the South African Astronomical Observatory (SAAO). Preference will be given to candidates with background and experience in the field of multi-wavelength observations of interacting binaries. This post is part of the research activities in observational high energy astrophysics of the SAAO Director, Professor Phil Charles (who may be contacted at pac@sao.ac.za for further information). Suitable candidates will have some prior observational experience (either space or ground-based) in the study of interacting binaries, and preferably X-ray binaries. The appointment will be for two years, with a likely extension to a third year.

The SAAO is the National Facility for Optical/Infrared astronomy in South Africa. Its headquarters are in Cape Town where the successful applicant will be based. Observing facilities, situated 360 km away at Sutherland, include the 10-m class Southern African Large Telescope (SALT), which is currently undergoing commissioning, together with six smaller telescopes (ranging from 0.5 to 1.9m). SALT is being operated by SAAO on behalf of an international consortium and about one third of its observing time will be available to the South African research community.

While the successful applicant will spend most of her/his time on research, he/she will also be encouraged to contribute to SALT instrumentation and/or software development programmes. More details of SAAO and SALT are available at - www.sao.ac.za and www.salt.ac.za.

Applicants must have a PhD in astrophysics or a related subject. They should submit a curriculum vitae and brief statement of research interests by October 1, 2005 to:

The Personnel Officer, Ms Linda Tobin, SAAO, P O Box 9, Observatory, 7935 South Africa.
Phone: +27 21 4470025; Fax: +27 21 447 3639; e-mail: linda@saa0.ac.za.

Applicants should also arrange for three referees to write on their behalf to the same address and by the same due date. e-mail applications and references are acceptable and strongly encouraged.

SAAO is committed to equity.

No. 21960

ESO Postdoctoral Fellowships

EUROPEAN ORGANISATION FOR ASTRONOMICAL RESEARCH IN THE SOUTHERN HEMISPHERE

Karl-Schwarzschild-Str. 2

Germany

Tel:

URL1: <http://www.eso.org/gen-fac/adm/pers/vacant/fellows2005-6.html>

(ESO Fellowship Announcement Page)

URL2: http://www.eso.org/gen-fac/adm/pers/vacant/fellowship05_form.pdf

(ESO Fellowship Application Form)

URL3: <http://www.eso.org/science>

(ESO Science Activities)

Email Submission Address: vacancy@eso.org

Email Inquiries: bleibund@eso.org

Attention: Fellowship Programme

ESO Fellowship Programme 2005/2006

The European Organisation for Astronomical Research in the Southern Hemisphere (ESO) awards every year several postdoctoral fellowships. The fellowships offer a unique opportunity to carry out personal research programmes in an international environment and to work with some of the world's premier astronomical facilities.

Scientific excellence is the prime selection criterium. Young scientists from all astrophysical fields are welcome to apply.

For the first time this year, four dedicated ALMA fellowships will be offered (two in Garching and two in Santiago).

In Garching fellowships start with an initial contract of one year followed by a two-year extension.

In Chile, the fellowships are granted for one year initially with an extension of three additional years. During the first three years, fellows work 80 nights/year at one of the observatories. The fourth year is free of duties and several options are provided. The fellow may spend the fourth year either at a Chilean institution, at ESO's Astronomy Center in Santiago, at the ESO Headquarters in Garching, or at any institute of astronomy/astrophysics in an ESO member state. For further information, please consult the web pages.

We offer an attractive remuneration package including a competitive salary (tax-free), comprehensive social benefits, and provide financial support in relocating families.

Selected fellows can join ESO only after having completed their PhD degree. The application form, as well as the list of further material to be submitted can be found at the above URLs.

The closing date for applications is October 15, 2005.

No. 21961

**Research Assistant (Post Doctoral) in Astrophysics
UNIVERSITY COLLEGE LONDON/MULLARD SPACE SCIENCE LABORATORY
UK**

Tel: 01483 204 110

FAX: 01483 278 312

**URL1: <http://www.mssl.ucl.ac.uk/pages/jobs/jobs.html>
(links to job and person specifications)**

Email Submission Address: ead@mssl.ucl.ac.uk

Email Inquiries: mjp@mssl.ucl.ac.uk

Attention: Mrs Libby Daghorn

The Mullard Space Science Laboratory of University College London (based in the Surrey Hills) is seeking a postdoctoral research assistant to undertake a research programme relating to X-ray and multiwavelength extragalactic surveys. The research will be supported by the department's PPARC rolling grant. Candidates with an interest in faint X-ray source populations, infrared/submillimetre galaxy populations, galaxy formation and the role of supermassive black holes, and a background in this or a related area are encouraged to apply. Salary in range £22,289-£30,002. To apply, please send a CV, publication list and the details of three referees to Mrs. E. Daghorn (ead@mssl.ucl.ac.uk). More details of the post can be found on <http://www.mssl.ucl.ac.uk/pages/jobs/jobs.html> . For further information contact Dr M. J. Page (jp@mssl.ucl.ac.uk (UCL Taking Action for Equality)

No. 21968

**POST DOC HIGH ENERGY ASTROPHYSICS
SMITHSONIAN ASTROPHYSICAL OBSERVATORY
60 GARDEN STREET**

MAIL STOP 4

CAMBRIDGE, MASSACHUSETTS 02138

USA

Tel: 617-495-7169

FAX: 617-496-7577

Email Submission Address: garcia@head.cfa.harvard.edu

Email Inquiries: dsteeghs@cfa.harvard.edu

Attention: Attention: Dr. Michael R. Garcia and Dr. Danny Steeghs, ASTROPHYSICISTS

"A postdoctoral fellowship is available immediately at the Smithsonian Astrophysical Observatory of the Harvard-Smithsonian Center for Astrophysics to work with Dr. M. Garcia

and Dr. D. Steeghs on X-ray and optical observations of accreting compact objects."

The fellow will have full responsibility for continuing our Black Hole X-ray Transients in M31 project using Chandra and HST to find and investigate X-ray transients in our nearest neighbor spiral galaxy. This program has been ongoing since the Chandra mission began. This represents the longest continuous x-ray monitoring program of an external galaxy; The data provides unprecedented detail and sensitivity within M31, allowing the X-ray luminosity function of various classes of sources to be studied. The program also allows detailed investigations of SNR, the diffuse emission, M31's central super-massive black hole, and has turned up several unexpected results.

The fellow will also join our active High Energy Division group studying interacting binaries. He/She may participate in our multi-wavelength campaigns studying accretion onto compact objects making use of both space-based observatories and the CfAs optical facilities in Arizona (MMT) and Chile (Magellan). Possible projects include ultra-compact white dwarf binaries, Doppler tomography of the accretion flows surrounding white dwarfs, neutron stars and black holes and dynamical mass constraints using fluorescence lines.

Applicants should be familiar with the subject matter of binaries and accretion, and have experience with the reduction of large datasets. Experience with analysis of Chandra, XMM, HST and ground based optical spectroscopy is desirable.

This project is supported by NASA GO grants. The position is for two years with a (possible) extension for a third year. Women and minority candidates are encouraged to apply. Send a vita, bibliography, statement of research experience and interests, and arrange for at least three letters of reference.

No. 21969

Assistant Research Scientists in Cosmology

JOHNS HOPKINS UNIVERSITY DEPARTMENT OF PHYSICS & ASTRONOMY

Department of Physics & Astronomy

3400 N. Charles Street

Baltimore, MD 21218

USA

Tel: 410-516-4323

FAX: 410-516-7239

Email Submission Address: cbennett@jhu.edu

Email Inquiries: cbennett@jhu.edu

Attention: C. Bennett, Professor of Physics & Astronomy

The Center for Astrophysical Sciences at Johns Hopkins University seeks experienced assistant research scientists in the areas of cosmic microwave background experimental and analytical research, and in experimental and observational dark energy research. Research is conducted in close collaboration with the nearby NASA Goddard Space Flight Center in support of WMAP, LAMBDA, JDEM, and other projects. Applicants must have a Ph.D. in astrophysics or closely related field and relevant research experience. The review of materials will begin immediately upon receipt of applications and all applications must be submitted by December 1, 2005. Specific questions about the positions may be addressed to

cbennett@jhu.edu. Applications including curriculum vitae, a statement of interest and relevant work experience, and a list of publications should be sent to:

Professor C. Bennett, Department of Physics and Astronomy, Johns Hopkins University, 3400 North Charles St., Baltimore, MD 21218

Applicants must also arrange for three letters of reference to be sent to the same address.

No. 21970

Senior Electronics Technician

GEMINI OBSERVATORY

670 N. A'ohoku Place

Hilo, HI 96720

USA

Tel: 808-974-2500

FAX: 808-933-1624

URL1: <http://www.gemini.edu>

(Gemini Observatory Home Page)

URL2: <http://www.gemini.edu/jobs>

(Gemini Observatory Jobs Page)

Email Submission Address: gemini-jobs@gemini.edu

Attention: Human Resources/SET-AAS

Immediate opening for a highly experienced Senior Electronics Technician to assist with the maintenance, development, construction and installation of electrical, electronic, and astronomical instrumentation systems of Gemini Observatory on Mauna Kea. Requires expertise in electronic systems maintenance and upgrades, as well as applied knowledge in digital and analogue circuit theory. Previous experience with large telescopes and astronomical instrument systems is highly desirable. Must have troubleshooting, diagnostic, and repair skills; ability to read and generate documentation and schematics; and experience with CAD, spreadsheet and word processing programs. Requires associate's degree in electronics or electronic technology or related field or equivalent experience plus four years additional experience.

Must be able to work at 14,000-foot elevation, possess a valid driver's license, have a clean driving record, and be able to drive a 4WD vehicle. Must be legally authorized to work in the US. Must have, or be able to obtain, a valid passport for international travel.

Send resume with salary history and the names and contact information of four references by 10/01/05 to: gemini-jobs@gemini.edu. AA/EOE

No. 21971

FACULTY POSITION IN ASTRONOMICAL INSTRUMENTATION-PONTIFICIA

UNIVERSIDAD CATOLICA DE CHILE

PONTIFICIA UNIVERSIDAD CATOLICA DE CHILE

4860 Vicuna Mackenna

Macul

Santiago, Region Metropolitana 6904411

Chile**Tel: 5623544196****FAX: 5625522563****URL1: <http://www.ing.puc.cl/esp/infacademica/concursos/index.html>****Email Submission Address: pgazmuri@ing.puc.cl****Email Inquiries: srios@ing.puc.cl*****Attention: Pedro Gazmuri, Vice Dean***

FACULTY POSITION IN ASTRONOMICAL INSTRUMENTATION ESCUELA DE INGENIERIA PONTIFICIA UNIVERSIDAD CATOLICA DE CHILE

The Faculty of Engineering at the Pontificia Universidad Catolica de Chile offers a new position in the Electrical Engineering Department at the Assistant Professor level, available as early as September 2005.

The new member of staff will join the research and teaching activities of both the Department of Electrical Engineering (DEE) at the School of Engineering, and the Department of Astronomy and Astrophysics (DAA) at the Faculty of Physics. She/he will also have to strongly interact with engineering and astronomy students.

Presently, the DEE includes 13 faculty who work in the areas of Control, Instrumentation, Robotics, Power Systems and Telecommunications, and the DAA includes ten faculty and several post-docs doing research in the areas of observational and theoretical cosmology, and extragalactic and stellar astrophysics. Both Departments would like to develop a new group in areas related to mm-radio astronomy. The selected candidate is expected to lead the instrumentation area of this group.

The successful applicant will interact closely with engineers and scientists in the international observatories in Chile, including ESO/VLT, Gemini, Magellan, and ALMA.

Teaching duties will be in astronomical engineering, at the undergraduate and graduate levels.

Job Requirements

Even though high priority will be given to engineers and scientists with mm-radio instrumentation backgrounds, applicants from all areas with experience in astronomical instrumentation are encouraged to apply.

Successful candidates must have a Ph.D. and a demonstrated ability and commitment to excellence in independent research and teaching.

No. 21972**Supernovae / Gamma Ray Bursts****AUSTRALIAN NATIONAL UNIVERSITY****Tel:****URL1: <http://www.mso.anu.edu.au>****Email Submission Address: jobs@anu.edu.au****Email Inquiries: academic.services.rsaa@anu.edu.au**

Attention: Recruitment Officer

The Research School of Astronomy and Astrophysics at the Australian National University invites applications for a Postdoctoral or Research Fellow to work on supernovae and gamma ray bursts. The successful candidate will work with Prof Brian Schmidt and Dr Bruce Peterson on a program to understand the physics of supernovae and gamma ray bursts, and using them as cosmological probes. Work will take place on independent projects, as well as within the Essence Project (which is using SN Ia to measure the equation of state of Dark Energy) and the REACT GRB network. The candidate should possess a PhD in astronomy or a related field and have expertise in one or more of the following areas: Optical/IR photometry and spectroscopy, supernovae and gamma ray burst observations, supernovae physics, observational cosmology. It is preferable for the position to be taken up in the first half of 2006. Appointment: 2 years fixed term at postdoctoral or research fellow level, depending on qualifications and experience. Salary: \$AUD52,863 - \$AUD70,106 plus generous (17%) superannuation and a relocation allowance. Selection criteria must be obtained prior to application and may be obtained from: <http://info.anu.edu.au/hr/jobs> (ANU job reference: RSAA2999) or from: academic.services.rsaa@anu.edu.au. Enquiries about the position: Prof Brian Schmidt (brian@mso.anu.edu.au). Closing date: 1 October 2005. Candidates should arrange for at least 2 referees to submit their reports directly to: academic.services.rsaa@anu.edu.au, by the closing date.

No. 21973**optical imaging / photometry / astrometry****AUSTRALIAN NATIONAL UNIVERSITY**

Tel:

URL1: <http://www.mso.anu.edu.au>Email Submission Address: jobs@anu.edu.auEmail Inquiries: academic.services.rsaa@anu.edu.au**Attention: Recruitment Officer**

The Research School of Astronomy and Astrophysics at the Australian National University invites applications for a Postdoctoral or Research Fellow to work on the Sky Mapper Telescope and associated Southern Sky Survey. The successful candidate will work with Prof Brian Schmidt, Prof Mike Bessell, Dr Paul Francis and Dr Stefan Keller on a program to carry out a 6-colour multi-epoch survey of the entire southern sky using the new Sky Mapper Telescope. The candidate will be expected to help develop the data pipeline, help commission the telescope, and use the southern sky dataset in their own scientific program. More information on the Sky Mapper telescope is available at: <http://www.mso.anu.edu.au/skymapper>. The candidate should possess a PhD in astronomy or a related field, have expertise in optical imaging, photometry and/or astrometry, and have developed programming skills in one or more of the following languages: C, PERL, python, SQL. It is preferable for the position to be taken up in the first half of 2006. Appointment: 3 years fixed term at postdoctoral or research fellow level, depending on qualifications and experience. Salary: \$AUD52,863 - \$AUD70,106 plus generous (17%) superannuation and a relocation allowance. Selection criteria must be obtained prior to application and may be obtained from: <http://info.anu.edu.au/hr/jobs> (ANU job reference: RSAA3000) or from: academic.services.rsaa@anu.edu.au. Enquiries about the position: Prof Brian Schmidt

(brian@mso.anu.edu.au). Closing date: 1 October 2005. Candidates should arrange for at least 2 referees to submit their reports directly to: academic.services.rsaa@anu.edu.au , by the closing date.

No. 21974

Professorship in Astronomy (GAIA-related science)

ZENTRUM FUER ASTRONOMIE AT HEIDELBERG UNIVERSITY (ZAH)

Moenchhofstr. 12-14

Germany

Tel: +49 6221 541800

FAX: +49 6221 541802

URL1: <http://www.ari.uni-heidelberg.de/index.html.en>

(Astronomisches Rechen-Institut (ARI))

URL2: http://www.uni-heidelberg.de/index_e.html

(Heidelberg University)

URL3:

Email Submission Address: jkw@ari.uni-heidelberg.de

Email Inquiries: jkw@ari.uni-heidelberg.de

Attention: Joachim Wambsganss, Prof.

The newly established "Zentrum für Astronomie" of Heidelberg University (ZAH) invites applications for a Professorship in Astronomy (W3).

The professorship is located at the Astronomisches Rechen-Institut (ARI), which is one of the three institutes constituting the ZAH, the other two being the Institut für Theoretische Astrophysik (ITA) and the Landessternwarte Königstuhl (LSW).

The professorship will involve heading the group at the ZAH that deals with planning, preparation and running of the ESA Cornerstone Mission GAIA. In addition, coordination and organisation of the national scientific contributions to GAIA will be part of the tasks.

The successful candidate is expected to have a high international research profile in at least one of the following scientific fields: precision astrometry, Galactic structure and evolution, stellar classification and parametrisation, stellar populations, organisation of distributed data reduction tasks in astronomy. Conditions for employment are habilitation or equivalent scientific qualification, as well as pedagogical aptitude.

As a member of the Faculty of Physics and Astronomy at Heidelberg University, the successful candidate will participate in the teaching program as well as in the academic administration.

Heidelberg University plans to increase the fraction of female scientists in research and teaching and hence particularly encourages qualified female scientists to apply. Severely handicapped candidates are given preference if equally qualified.

The position is available as tenured. Local university law (LHG BW, §50, 1) requires that the job will be awarded as tenure-track only, if it is the first professorship for the successful candidate. For the tenure process, no new application procedure is required.

Interested candidates should send their applications (including cv, short description of scientific career and interests, publication list, teaching and talk list) no later than October 15, 2005 to the acting director of ZAH:

Prof. Joachim Wambsganss Zentrum für Astronomie Universität Heidelberg Mönchhofstr. 12-14 69120 Heidelberg Germany

No. 21975**Postdoctoral Position in Astrophysics
SCIENCE INSTITUTE, UNIVERSITY OF ICELAND**

Tel:

Email Submission Address: gulli@raunvis.hi.isEmail Inquiries: gulli@raunvis.hi.is***Attention: Gunnlaugur Bjornsson***

The Science Institute, University of Iceland, has an opening for a postdoctoral fellow to pursue theoretical research into the use of gamma-ray bursts in cosmology. The candidate will join the research group of Gunnlaugur Bjornsson and Einar H. Gudmundsson. We are in close collaboration with the Cosmology group of the Niels Bohr Institute at the University of Copenhagen, Denmark, and are affiliated with the European research network "Gamma Ray Bursts -- an enigma and a tool", with nodes throughout Europe.

For further information about the Institute and the University of Iceland, see www.raunvis.hi.is and www.hi.is. For inquiries contact gulli@raunvis.hi.is or einar@raunvis.hi.is.

Review of applications will begin on October 10th and continue until the position is filled. Applicants should provide a CV and a list of publications, along with a brief (1-3 pages) description of research interests. They should also arrange for three letters of recommendation to be sent separately.

The postdoctoral fellowship is for 2 years with the possibility of extension depending on available funding. A PhD degree and relevant research experience are required.

No. 21976**Postdoctoral Positions in Theoretical Astrophysics
UNIVERSITY OF KENTUCKY**

Tel:

URL1: <http://www.pa.uky.edu/~shlosman/postdoc.html>Email Submission Address: shlosman@pa.uky.eduEmail Inquiries: shlosman@pa.uky.edu***Attention: Dr. Isaac Shlosman***

Applicants are sought for one and possibly two postdoctoral positions in theoretical astrophysics. The preferred starting date is October 2005 but earlier or later dates will be considered as well. The appointment will be for two years with a possibility of extension for additional year, contingent on continuing funding. Appointees must have a Ph.D. in physics or

astronomy, and will work with Dr. Isaac Shlosman on different aspects of galaxy formation and evolution and related issues. Experience with N-body, hydro- and SPH codes is desirable.

The University of Kentucky provides an excellent environment for computational research. The options include HP's SuperDomes (256 nodes) and a dedicated Linux Cluster for the galactic dynamics group.

Applicants should submit a resume, a list of publications, a short description of research interests, and arrange for three letters of recommendation --- all to be e-mailed to shlosman@pa.uky.edu, no later than October 1, 2005. Selection process will start immediately. Inquiries are welcomed.

No. 21977

**Program Officer, Advanced Technologies and Instrumentation in Optical/IR Astronomy
NATIONAL SCIENCE FOUNDATION**

**4201 Wilson Blvd.
Arlington, VA 22230
USA**

Tel: 703-292-4351

URL1: <http://www.nsf.gov/jobs>

Email Submission Address: lcodario@nsf.gov

Email Inquiries: efriel@nsf.gov

Attention: Lisa Codario, Human Resources Specialist

DIVISION OF ASTRONOMICAL SCIENCES National Science Foundation, Arlington, VA

NSF's Division of Astronomical Sciences is seeking qualified applicants for the position of Program Officer, Advanced Technologies and Instrumentation in Optical/IR Astronomy. The candidate will have primary responsibility for the oversight, coordination and management of grants programs and projects involving optical/IR instrumentation and technology development, including the optical/IR component of the Division's Advanced Technologies and Instrumentation (ATI) program, the Program for Research and Education with Small Telescopes (PREST), the community instrumentation programs being coordinated at the National Optical Astronomy Observatory (NOAO), such as the Telescope Systems Instrumentation Program (TSIP) and the Adaptive Optics Development Program (AODP), and the NSF-wide instrumentation programs such as the Major Research Instrumentation (MRI) program. In consultation with other Program Officers in the Division, the incumbent will coordinate these diverse programs with the ongoing instrumentation and technology development efforts at the national observatories (Gemini, NOAO, NSO) in order to develop and optimize an efficient and cost-effective system of ground-based optical/IR instrumentation. The candidate may manage or assist in the review and administration of projects involving the design and development of future facility-class instruments or observing capabilities and in the disciplinary research grants programs according to his/her scientific expertise. The candidate will be involved in activities that include planning, budget development, the merit review and proposal recommendation process, the preparation of written material about the research supported by the Division, and liaison with other NSF programs, Federal agencies and organizations. The candidate must possess knowledge of advanced instrumentation, especially as it applies to optical and IR astronomy. Candidates are expected to work with the

astronomical research and education community to broaden the diversity of participants in NSF programs. The position will be filled on a permanent or a rotator appointment basis to commence in late 2005. The salary range, which includes locality pay adjustment, is from \$88,369 to \$137,713 per annum. Applicants must have a Ph.D. or equivalent experience in astronomy, astrophysics, or a closely related field, plus six or more years of successful research, research administration, and/or managerial experience beyond the Ph.D. Announcements E20050123 and E20050124-Rotator, with position requirements and application procedures, are located on the NSF Home Page at www.nsf.gov/jobs. Applicants should submit a resume or application of your choice, up to three letters of recommendation, and a narrative statement that addresses your background and/or experience related to the position to the address above by September 30, 2005. Applicants should refer to vacancy announcement number E20050123 for the Permanent position and E20050124 for the Rotator position. Telephone inquiries may be referred to Lisa Codario at 703-292-4351 (E20050123) or to the Executive and Visiting Personnel Branch, at 703 292-8755 (E20050124). For technical information, contact Dr. Eileen D. Friel, AST Executive Officer, 703-292-4895. (Hearing impaired individuals may call TDD 703-292-8044).

NSF is an Equal Opportunity Employer. The National Science Foundation provides reasonable accommodations to applicants with disabilities on a case-by-case basis. If you need a reasonable accommodation for any part of the application and hiring process, please notify the point of contact listed on this vacancy announcement.

No. 21978

PLASKETT FELLOWSHIP

NATIONAL RESEARCH COUNCIL OF CANADA (NRC)

NRC Herzberg Institute of Astrophysics (NRC-HIA)

Dominion Astrophysical Observatory (DAO)

5071 W Saanich Rd, Victoria, BC V9E 2E7

CANADA

Tel: 250-363-3436

FAX: 250-363-8766

URL1: <http://plaskett.hia.nrc.gc.ca>

Email Inquiries: plaskett@hia.nrc.gc.ca

Attention: Plaskett Fellowship Committee

The NRC-HIA invites applications for Plaskett Fellowships tenable at DAO. The awards are made to outstanding recent doctoral graduates in astrophysics or a closely related discipline to conduct independent research in a stimulating, collegial environment. The award is for a maximum of three years; the initial appointment of two years may be extended for one further year (subject to performance and availability of funds). In addition to highly competitive benefits and salary, Fellows receive support for observing and conference travel, page charges, and access to professionally managed computers and the Canadian Astronomy Data Centre, which is home to the Canadian Virtual Observatory and data archives from, e.g., CFHT, CGPS, FUSE, HST, Gemini, JCMT.

Staff expertise is in observational astrophysics, but we welcome applications from theoreticians whose research requires close interaction with observers. Fellows are eligible to apply for Canadian time on CFHT, FUSE, Gemini & JCMT, to use the optical and radio

telescopes operated by NRC-HIA in Victoria and Penticton, and/or to apply for time on other facilities with open proposal processes. NRC-HIA is a leading developer of instrumentation for ground- and space-based telescopes (e.g., ALMA, CFHT, Gemini, JCMT, JWST, TMT), and Fellows are welcome to participate in development or commissioning of new instruments.

Applicants must have acquired their Ph.D. within the last five years or expect to obtain the degree before taking up the Fellowship in 2006. Applications should be made by 2 December 2005, via the process described at the URL provided.

NRC is an equal opportunity employer.

Ces renseignements sont aussi disponibles en français.

No. 21979

**2006 Chamberlain Fellowship E.O. Lawrence Berkeley National Laboratory
E.O. LAWRENCE BERKELEY NATIONAL LABORATORY**

Tel:

URL1: <http://jobs.lbl.gov>

Email Submission Address: Chamberlain.Fellow@lbl.gov

Attention: Chamberlain Fellow

The Berkeley Lab Physics Division invites outstanding recent PhD recipients to enter the completion for the 2006 Owen Chamberlain Fellowship in experimental elementary particle physics and cosmology. Students who expect to receive their PhD degree by the spring of 2006 are also invited to apply.

A Chamberlain Fellow is appointed for three years, with two years of extension possible upon review. Upon appointment, a Chamberlain Fellow is given time to review the Division's research program and may choose to participate in any aspect of it. With the Division Director's approval, he/she may also pursue new initiatives within experimental particle physics or cosmology. In addition to his/her salary, a Chamberlain Fellow receives a \$5,000.00 annual research supplement. Funding for new initiatives is available through a competitive Laboratory-wide program.

Opportunities for collaboration in exciting and diverse physics programs are found both at Berkeley Lab and on the UC Berkeley campus, including research mentorship of physics PhD students. Close interactions with local astrophysics communities are possible, as the relationships with nuclear and accelerator scientists, and access to world-leading computation. For information on the Berkeley Lab Physics Division's research program, please consult <http://www.physics.lbl.gov>

This Fellowship honors Berkeley Nobelist Owen Chamberlain, who (with Emilio Segre, Clyde Wiegand, and Thomas Ypsilantis) discovered the antiproton at the Berkeley Bevatron in 1955. Applications will be considered starting October 15, 2005, and should include a curriculum vitae, publication list and statement of research interests. Candidates should have at least three letters of reference sent. All materials should be emailed to both Chamberlain.Fellow@lbl.gov and <http://jobs.lbl.gov> by October 28, 2005. Please reference Job #018295. LBNL is an equal opportunity employer committed to developing a diverse

workforce.

No. 21980
Postdoc for LOFAR EoR Keyproject
KAPTEYN INSTITUTE, UNIVERSITY OF GRONINGEN
Postbus 2
Dwingeloo, Drenthe 7991 PW
The Netherlands
Tel: 31-521-595257
FAX: 31-521-597332
URL1: <http://www.lofar.org>
URL2: <http://www.astron.nl>
Email Submission Address: ger@astron.nl
Email Inquiries: ger@astron.nl

Attention: A.G. de Bruyn, Prof. dr.

One of the biggest and boldest endeavours to be undertaken with LOFAR, a revolutionary radio telescope under construction in the Netherlands, is the search for the redshifted 21cm line of neutral hydrogen during the phase in which the Universe is believed to have become re-ionized. LOFAR is sensitive to HI signals emitted between redshifts of $z = 6-11.5$.

We have started a vigorous program preparing for the many challenges faced within this project: through observations in the 115-180 MHz frequency range using the Westerbork Synthesis Radio Telescope, through observations with an existing pilot phased array station near the WSRT and through planned LOFAR teststations. First observations with the full core of LOFAR (see www.lofar.org) are planned for 2007.

To help with the analysis of the WSRT and pilot-facility observations, the commissioning of LOFAR as well as the testing of the novel calibration software, we seek one or more experienced radio astronomers. A scientific interest in the cosmological questions surrounding the EoR, and/or the diffuse Galactic foreground contaminants, would be an advantage.

The succesful candidate will work in a team of software engineers, astronomers, students and postdocs. The position is for 3 years and will be based at the Kapteyn Institute of the University of Groningen. Part of the work will be carried out at the ASTRON institute in Dwingeloo, 50 km south of Groningen, from where the LOFAR project is run..

Information can be obtained from A.G. de Bruyn (ger@astron.nl) or M. van Haarlem (haarlem@astron.nl).

An application letter, CV, and 3 letters of reference, should be received by October 1, 2005 (email suffices) when we will start the review proces.

No. 21981
Science Outreach Specialist (ID#25494)
JOINT ASTRONOMY CENTRE
2350 Dole Street
Sakamaki Hall D-100

Honolulu, Hawaii 96822

USA

Tel: 808/956-3100

FAX: 808/956-5022

URL1: <http://www.rcuh.com/>

URL2: <http://www.jach.hawaii.edu/admin/employment/>

Email Inquiries: s.oneal@jach.hawaii.edu

Attention: Director of Human Resources

The JAC supports two of the world's most powerful telescopes on the summit of Mauna Kea, Hawaii: the James Clerk Maxwell Telescope (JCMT) the largest telescope in the world specifically designed to operate at submillimetre wavelengths and UKIRT (United Kingdom Infrared Telescope) the world's leading telescope dedicated to work in the near and thermal-infrared.

Duties: Responsible for developing and maintaining a variety of Science Outreach materials representing the JAC's science and facilities, organizing and giving presentations at outreach-related events and representing the JAC as appropriate. A program of astronomical research is negotiable for qualified candidates.

Requirements: Bachelor's Degree from accredited college or university in astronomy, or physics with significant astronomy content (in exceptional cases an equivalent level of experience and/or other postgraduate training may be acceptable). Minimum 2 years experience in infrared or submillimetre astronomy (including observation techniques and data reduction), experience presenting astronomical results and concepts to the public; or 2–3 years of experience in scientific public outreach.

Desirable: Ph.D. in Astronomy or Physics. Good working knowledge of fundamental astrophysical processes, astronomical observing techniques and astronomical data reduction techniques. Previous use of UKIRT or JCMT and their data reduction software. Knowledge of Java, php, or other web-related programming languages.

Relocation package and comprehensive benefits included.

For further details go to <http://www.jach.hawaii.edu/admin/employment> or call Susan O'Neal at 808-969-6527.

Send cover letter (note ID #25494) with narrative on your qualifications for the position, resume with salary history, three supervisory references, and copy(ies) of diploma(s) and/or certificate(s) used to qualify for position to the Director of Human Resources at the above address. EEO/AA Employer.

Closing Date: 30 September 2005.

No. 21982

SCUBA-2 Instrument Scientist

JOINT ASTRONOMY CENTRE

Polaris House

North Star
Swindon, England SN1 1SZ
United Kingdom
Tel: +44(0) 1793-442109
FAX: +44(0) 1793-442099
URL1: <http://www.jach.hawaii.edu/admin/employment/>
Email Inquiries: p.friberg@jach.hawaii.edu

Attention: Ms. L. Wardale

The JAC operates two of the world's most powerful telescopes near the summit of Mauna Kea, on the Big Island of Hawaii: UKIRT (United Kingdom Infrared Telescope) the world's leading telescope dedicated to work in the near and thermal-infrared and James Clerk Maxwell Telescope (JCMT) the largest telescope in the world specifically designed to operate at submillimetre wavelengths.

SCUBA-2 is a revolutionary new instrument for the JCMT, currently under construction at the UK Astronomy Technology Centre (UKATC) in Edinburgh. Scheduled for delivery in 2006, SCUBA-2 will use a number of technological and operational innovations.

For an applicant with a Masters or Ph. D. degree in Astronomy, a research allocation is negotiable.

Duties: The postholder will be based at the UKATC for up to one year to participate in the assembly, integration and verification phase of the project, gain experience in design and operation of the instrument, execute system verification tests, and analyse and interpret the results. The post will then transfer to the JAC, to participate in the installation and commissioning of the instrument.

Requirements: Bachelors degree from an accredited college in physics, engineering physics or engineering. Minimum 4 years post graduate troubleshooting, designing and/or building complex instrumentation. Experience with low-temperature experimentation, and combination of superconductor physics, detector physics, optics, electronics and data acquisition.

Desirable: Experience with data reduction, astronomy or astronomical observing (preferably in submillimetre range), continuum submillimetre or infrared instrumentation. Doctoral degree in field of direct relevance to SCUBA-2.

Relocation package and comprehensive benefits included

For further details go to <http://www.jach.hawaii.edu/admin/employment> or call Susan O'Neal at 808-969-6527.

Application forms may be obtained from the JAC website;
<http://www.jach.hawaii.edu/admin/employment/>

Closing Date: 30 September 2005.

EEO/AA Employer.

No. 21983
Research Associate in Radio Astronomy
CORNELL UNIVERSITY
504 Space Sciences Bldg.
Ithaca, NY 14853
USA
Tel:
Email Submission Address: jtm14@cornell.edu
Email Inquiries: cordes@astro.cornell.edu

Attention: Jill Tarbell, Administrative Asst.

Cornell University is soliciting applications for a post-doctoral research associate to work on a large-scale multibeam pulsar survey using the Arecibo L-band Feed Array system at the Arecibo Observatory. The position, based in Ithaca, NY in the group of Professor James Cordes, allows a significant fraction of time to be spent on self-directed research. Areas of interest in the group include diverse studies of compact objects, the interstellar and intergalactic media, transient sources, and development work for the Square Kilometer Array. Research topics associated with the ALFA survey include follow-up observations on new pulsars (e.g. timing, VLBI, polarimetry, optical searches for bow-shock nebulae and high-energy studies using Chandra and GLAST) and their interpretation; population studies to elucidate the relationship between pulsars and magnetars and to infer target source classes for LIGO; modeling of the interstellar medium; and data mining to search for new classes of radio sources. The ALFA survey is being archived at the Cornell Theory Center in a large-scale project also involving the Computer Science Department at Cornell. Subject to the availability of funding, the position is for a two-year period with the possibility of a third year extension. Please send a statement of research interests and CV and arrange for three letters of recommendation to be sent to PostDoc Position in Compact Objects, c/o Jill Tarbell, 504 Space Sciences Building, Cornell University, Ithaca, NY 14853 (jtm14@cornell.edu). Applications will be reviewed starting October 1, 2005. The position is available immediately. For additional information, contact J. Cordes at cordes@astro.cornell.edu or +1 607.255.0608.

American Astronomical Society, 2000 Florida Ave., NW, Suite 400, Washington, DC 20009,
USA
202-328-2010 * FAX 202-234-2560 * www.aas.org * aas@aas.org