



February 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

There is a publication charge of \$114 per job announcement, per issue.

If payment is made by credit card, a discount of \$5 is applied for each month of publication.

An additional \$0.25 will be charged to each word over the 250 word limit.

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 insitutions 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).

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. 21303

STAFF POSITION in extragalactic astrophysics or cosmology

MAX-PLANCK-INSTITUT FUER ASTROPHYSIK

Karl-Schwarzschild-Str. 1

Garching bei Muenchen, Germany 85748

Germany

Tel: +49 89 30000 2201

FAX: +49 89 30000 2899

URL1: <http://www.mpa-garching.mpg.de>

Email Submission Address: car@mpa-garching.mpg.de

Attention: The Appointments Committee

STAFF POSITION in extragalactic astrophysics and cosmology at the Max-Planck-Institut fuer Astrophysik

The Max Planck Institut for Astrophysics (MPA) seeks candidates for a staff position in extragalactic astrophysics or cosmology.

The MPA is an independent institute within the Max Planck Society and carries out a broad programme of theory and data analysis covering much of astrophysics. It has a particularly strong tradition in numerical astrophysics. Areas of concentration in extragalactic astrophysics include: galaxy structures; galactic dynamics; galaxy formation and evolution; galaxy clusters; large-scale structure; gravitational lensing; the intergalactic medium; microwave background studies; AGN formation and evolution; physical cosmology. These are supported by active participation in ESA's Planck mission, in the Sloan Digital Sky Survey, in the ESO Distant Cluster Survey and in a number of European research networks. Further information about MPA and its research programmes can be found at <http://www.mpa-garching.mpg.de>.

Long-term staff at MPA are expected to carry out independent research programmes which complement and interact with those of other institute scientists. Typically they work with a number of the institute's postdocs and graduate students. Collaboration with other institute staff in all areas is strongly encouraged. The present post will be filled at tenure-track or, for an exceptional candidate, at tenured level. Applicants should provide a CV, a publication list, and a one-page research plan. They should also ask 3 referees to send letters to the Appointments Committee. The deadline is 15 February 2005, but late applications will be accepted until the post is filled. The MPA is actively committed to equal opportunity in employment.

No. 21416

Assistant Professor of Physics (Astronomy)

ALBION COLLEGE

611 E. Porter Street

Albion, MI 49224

US

Tel: 517-629-0263
FAX: 517-629-0264
URL1: <http://www.albion.edu>
Email Submission Address: mludington@albion.edu
Email Inquiries: mludington@albion.edu

Attention: Dr. Martin Ludington, Search Committee Chair

Introductory Astronomy: Albion College invites applications for a tenure-track assistant professor of Physics beginning August, 2005. Qualifications: Ph.D. in Physics, Astronomy, or a related field; ability to teach an introductory level, lab-based, observational astronomy course and some additional physics courses; demonstrated teaching excellence; and strong promise for research vitality in an area that may accommodate research projects for high-caliber, well-motivated undergraduates. ABD candidates will be considered. In 2005, the department will move into a newly renovated and expanded science complex, which will have dedicated research space for physics and astronomy. The department has two observatories, one with an 8" Alvan Clark refractor, and the other with 14" Celestron. In addition there will be one 10" and three 8" pier-mounted Meades and several smaller telescopes. The facility has a shared instrumentation laboratory with 400-MHz NMR, XRF, XRD, and low-background gamma ray spectrometers and a DNA sequencer. Research in astronomy-related areas is perceived to have the greatest overlap with the curricular needs of the department, but all applications will be considered. Albion College is a selective liberal arts college of 1800 students located in a small diverse community in south-central Michigan within an hour's drive of major universities. For full consideration, candidates should send a letter of application, vitae, undergraduate and graduate transcripts, a statement of teaching philosophy and evidence of effective teaching, a proposed research program, and the names and addresses (including email addresses) of three references to Martin Ludington, Search Committee Chair, Department of Physics, Albion College, Albion, MI 49224. Review of applications will begin February 15, 2005, and will continue until the position is filled. Albion College is an equal opportunity employer committed to diversity as a core institutional value.

No. 21418
Research Astronomer
CORNELL UNIVERSITY
228 Space Sciences Building
Dept. of Astronomy
Ithaca, NY 14853-6801
USA
Tel: 607-255-4805
FAX: 607-255-5875
Email Submission Address: LM19@cornell.edu
Email Inquiries: LM19@cornell.edu

Attention: Laurie McCall, Executive Staff Assistant

The Spitzer/IRS group at the Astronomy Department of Cornell University invites applications for Research Astronomer positions within the Spitzer Space Telescope (SST) Infrared Spectrograph (IRS) project (PI Jim Houck). Information on the Spitzer Space Telescope and

the IRS can be found at: <http://ssc.spitzer.caltech.edu> and <http://isc.astro.cornell.edu/> The successful applicant(s) is expected to play a significant role in the analysis, interpretation and publication of the IRS Guaranteed Time Observing (GTO) program on the Spitzer Space Telescope (SST). For the first 2.5 years of the Spitzer mission the IRS team has 875 hours of observations using all three instruments on board Spitzer (IRAC, IRS and MIPS). The IRS is working extremely well and the data quality is outstanding. The GTO program covers a wide range of scientific topics from our solar system, circumstellar disks, and ISM, to nearby galaxies, ULIRGs, AGN, and objects at high redshift. All observations of the IRS GTO program are covered by a one-year proprietary period. The successful applicant will actively participate in the interpretation of the scientific data, presentation of the results at scientific meetings and their publication in scientific journals. We are interested in innovative individuals with some background in infrared astronomy and/or spectroscopy, who work well on group activities, and have the desire to see the scientific end products. A Ph.D. in astronomy, physics, or a closely related field is required. Applications from both observers and theorists with relevant experience are welcome. We are interested in individuals who have several years of post-PhD research experience as well as recent graduates. The appointment will initially be for two years, with possible extensions up to the expected 5+ (five-plus) years life time of the mission. Candidates will also have access to Cornell operated facilities (such as Palomar and Arecibo observatories) and benefit from stimulating scientific interactions within the Department of Astronomy (<http://www.astro.cornell.edu>). Salaries will depend on experience and are likely to be well above average. If this opportunity sounds interesting to you, please send a copy of your vita, research interests and the names of three individuals who are willing to write reference letters to Ms. Laurie McCall, Cornell University, 228 Space Sciences Building, Ithaca, NY 14853. Applications via email to lm19@cornell.edu are encouraged. For full consideration applications should be received before 15 April 2005, although applications will be reviewed up until the positions are filled.

No. 21444**Post-doctoral Researcher****U.S. NAVAL OBSERVATORY FLAGSTAFF STATION****P.O. Box 1149****West Highway 66****Flagstaff, Arizona 86002-1149****USA****Tel: 928-779-5132 x232****FAX: 928-774-3626****URL1: <http://www.nofs.navy.mil>****Email Submission Address: dgm@nofs.navy.mil****Email Inquiries: dgm@nofs.navy.mil*****Attention: David Monet, Astronomer***

The US Naval Observatory Flagstaff Station anticipates an opening for a post-doctoral researcher to work with the Wide Field Astrometry program. The goal of this program is to place the 1.3-m astrometric telescope and its large-format CCD mosaic camera into routine, automated operation and to optimize its mission and scientific productivity. Applicants with experience and expertise in the areas of telescope automation and scheduling, pipeline processing and calibration of data, and compilation and usage of large scientific databases will receive preference. The incumbent can anticipate up to 25 percent of his/her time will be

available for personal scientific research.

Applicants should send a discussion of their interests and qualifications, a list of recent publications, and a brief curriculum vita to David Monet, US Naval Observatory, P.O. Box 1149, Flagstaff AZ 86002, USA, or to dgm@nofs.navy.mil. Dave, and other members of the USNO staff, will be at the upcoming AAS meeting in San Diego, and personal interviews are recommended. Once the short list has been assembled, letters of recommendation will be solicited and the appropriate Federal forms will need to be completed.

The position will be a civil service term appointment for one year. A renewal for a second year will be made unless circumstances preclude this, and further renewals up to a maximum of four years will be considered. The US Government is an equal opportunity employer, but preference will be given to US citizens.

No. 21479

**FACULTY POSITION IN NUCLEAR ASTROPHYSICS
WESTERN MICHIGAN UNIVERSITY**

Physics Department, MS-5252

Western Michigan University

Kalamazoo, MI 49008-5252

USA

Tel: (269) 387-4940

FAX: (269) 387-4939

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

(Physics Dept. webpage)

Email Submission Address: Paul.Pancella@WMich.edu

Email Inquiries: Paul.Pancella@WMich.edu

Attention: Professor Paul V. Pancella, Department Chair

The Physics Department at Western Michigan University seeks candidates for a tenure-track faculty position at the assistant professor level, in the field of Nuclear Astrophysics, beginning Fall 2005, pending budgetary approval. Faculty in the Physics Department have ongoing research programs in experimental nuclear physics at the nearby ATLAS facility at Argonne National Laboratory, and the National Superconducting Cyclotron Laboratory at Michigan State University, studying nuclear structure, nuclear reactions, with an interest in astrophysical reactions. They are also actively involved in research in observational astrophysics, including spectroscopic observations with the Hubble Space Telescope, and numerical simulations of emission-line spectra. The successful candidate will be expected to pursue a vigorous research program that can encompass nuclear-physics research relevant to astrophysical phenomena, and/or studies of astrophysical processes. Opportunities for experimentally based research exist at nearby accelerator facilities at Argonne National Laboratory and Michigan State University. Collaboration with the Joint Institute for Nuclear Astrophysics at the University of Notre Dame, and interest in a research program at the planned Rare Isotope Accelerator (RIA), would also be encouraged. Other research areas could include the modeling of astrophysical environments, reaction network calculations, or application of nuclear physics data to astrophysical processes. The candidate must possess a strong commitment to undergraduate education, and will be expected to teach courses in astronomy and physics. Applicants must have Ph.D. in physics, astrophysics, or other related field. At least two years

of post-doctoral research experience is preferred.

Western Michigan University, a Carnegie Classification Research Extensive Institution, is an Equal Opportunity/Affirmative Action Employer and encourages applications from women, minorities and other underrepresented groups. Send letter of application, vita, statement of research and teaching philosophy, and three letters of reference to: Prof. Paul V. Pancella, Chair (email: Paul.Pancella@WMich.edu) Physics Department MS 5252, Western Michigan University, 1903 W. Michigan Avenue, Kalamazoo, MI 49008-5252. Review of applications will begin January 6, 2005 and applications will continue to be accepted until the position is filled.

No. 21488

St Andrews Astrophysics Fellowship

UNIVERSITY OF ST ANDREWS

College Gate, North Street

St Andrews, Scotland KY16 9SS

UK

Tel: 44 (0)1334 462571

FAX: 44 (0)1334 462570

URL1: <http://star-www.st-and.ac.uk/astronomy/>

(University of St Andrews Astronomy)

URL2: <http://www-st-andrews.ac.uk/hr/recruitment/vacancies/vacancy-list>

(Human Resources)

Email Submission Address: Jobline@st-andrews.ac.uk

Email Inquiries: kdh1@st-and.ac.uk

Attention: Human resources

SCHOOL OF PHYSICS AND ASTRONOMY

RESEARCH FELLOW IN ASTROPHYSICS

Salary: £19,460 - £35,883

The St Andrews Astrophysics Fellowship, intended to promote outstanding research and teaching in astronomy, is funded initially for three years, with a possible extension for a further two years. The position includes half-time teaching duties, allowing for a generous allocation of research time. You will be expected to undertake a world-class research program that complements and extends our current portfolio. The research interests of the Astronomy Group include the search for extra-solar planets, debris discs and young stellar objects, star and planet formation, magnetic activity of young stars, accretion in interacting binary stars and active galactic nuclei, galactic dynamics, and gravitational lensing.

You must have a PhD, postdoctoral experience and the proven ability to pursue independent research as evidenced by a record of publications.

Please quote ref: SK18/04 Closing Date: 25 February 2005

Application forms and further particulars are available from <http://www.st-andrews.ac.uk/hr/recruitment/vacancies> or from Human Resources, University of St Andrews,

College Gate, North Street, St Andrews, Fife KY16 9AJ, (tel: 01334 462571, by fax 01334 462570 or by e-mail Jobline@st-andrews.ac.uk).

The University operates Equal Opportunities and No Smoking policies.

No. 21489
NRAO Postdoctoral Positions
NATIONAL RADIO ASTRONOMY OBSERVATORY
P.O. Box 0
Socorro, NM 87801
USA
Tel:
URL1: <http://www.nrao.edu>

Attention: Dr. W.M. Goss, Head of Division of Science and Academic Affairs

NRAO Postdoctoral Positions

The National Radio Astronomy Observatory invites applications for a number of NRAO Postdoctoral appointments to be distributed between its Green Bank, WV and Socorro, NM operational sites. These positions provide 50% time for independent research, with the remaining 50% assigned to project and operational duties at the sites.

The starting salary will be \$45,000 per year. The appointment duration is two years, with renewal for a third year, by agreement. Conference and observing travel are supported. Computing resources, page charge support, vacation accrual, health insurance, and a moving allowance are also provided. Some appointments may be available as early as Spring 2005, with the remainder available in Fall 2005.

Functional needs at the Green Bank Telescope include support and development of the Penn Array Bolometer Camera (expected in 2005), support of visiting observers, development of the Precision Telescope Control System Project, and pulsar observing support and development.

Functional needs in New Mexico include EVLA scientific hardware testing, new EVLA receiver characterization, proto-type and WIDAR Correlator testing, developing sensor data for dynamic scheduling, water vapor radiometer tests, user support, documentation of EVLA procedures for outside users, and scientific support for e2e and offline software development

The candidates should have, or expect to receive by no later than 1 September 2005, a PhD in astronomy, physics, or a related field, and a plan of continuing independent research.

Appointments will be considered for Green Bank, WV, site of the 100-m GBT; and for Socorro, NM, the Operations Center for the Very Large Array (eventually EVLA) and the Very Long Baseline Array.

Applications should include a statement of research interests and plans, a description of any software or instrumentation experience, a curriculum vitae including a publication list, and the names of three scientists who have agreed to send in letters of reference. The application and letters of reference should be sent to: Dr. W. M. Goss, Division of Science and Academic

Affairs, NRAO, P.O. Box 0, Socorro, NM 87801-0387. All applications received by 15 February 2005 will receive full consideration. If any positions remain unfilled, additional applications will be accepted through 15 March.

No. 21490**Postdoctoral Positions in the Very-Long-Baseline Interferometry Group****MAX-PLANCK-INSTITUT FUER RADIOASTRONOMIE****Auf dem Huegel 69****Germany****Tel: +49 228 525 298****FAX: +48 228 525 229****URL1: <http://www.mpifr-bonn.mpg.de/div/vlbi/>****(MPIfR VLBI Group)****Email Submission Address: bnaunheim@mpifr-bonn.mpg.de****Email Inquiries: bnaunheim@mpifr-bonn.mpg.de*****Attention: Dr. J. A. Zensus, Director***

Applications are invited for up to two postdoctoral positions from recent Ph.D.s with experience in radio astronomy, especially in VLBI astrophysics and/or AGN research. The appointments will be made in the research group led by Dr. J. A. Zensus, for an initial one-year term starting in mid 2005, and renewable for up to two more years.

The VLBI group at the Max-Planck-Institut für Radioastronomie is engaged in a broad range of scientific fields, offering a number of research opportunities which include mm-VLBI, parsec-scale jets in AGN, gravitational lenses, radio supernovae, high precision astrometry, intraday variability in AGN, radio stars, ultra-luminous infra-red and Seyfert galaxies, cosmology, VLBI technology, radio interferometric imaging, and theoretical studies. The MPIfR offers access to first-rate research facilities, including a state-of-the-art VLBI correlator centre for astronomical and geodetic data analysis, the Effelsberg 100-meter radio telescope, the IRAM telescopes, and the APEX submillimetre telescope. It is also involved in the development of future facilities, such as ALMA and the Square Kilometre Array. The institute is member of the RadioNet consortium and participates in EU projects such as ENIGMA, ANGLES, and ALBUS.

Applicants will have the opportunity to pursue independent research and to collaborate in ongoing research projects. There is also ample opportunity to cooperate with graduate students in the International Max-Planck Research School program and to participate as a lecturer in this program to gain teaching experience.

Interested and qualified individuals are encouraged to submit vita, bibliography, research interests, and have three letters of recommendation sent to the above address. Email submission is also possible. The application deadline is 28 Feb 2005.

No. 21495**Reader/Professor of Astrophysics****ASTROPHYSICS RESEARCH INSTITUTE, LIVERPOOL JOHN MOORES UNIVERSITY****Rodney House****70 Mount Pleasant****Liverpool, Merseyside L3 5UX**

UK**Tel: +44 (0) 151 231 3519****FAX: +44 (0) 151 231 3191****URL1: <http://www.livjm.ac.uk/about/vacancies>****(Further details and application form)****URL2: <http://www.astro.livjm.ac.uk>****(ARI home page)****URL3: <http://www.livjm.ac.uk>****(LJMU home page)****Email Inquiries: cac@astro.livjm.ac.uk*****Attention: Personnel Office, Personnel Services***

The Astrophysics Research Institute (ARI) wishes to appoint an accomplished astronomer to lead and develop a major research program at the Institute. This post is part of a major expansion of the ARI involving 5 new academic positions created as a result of expansion and additional funding. It is expected that the appointee will have an outstanding track record of research achievement and leadership and will make a major contribution to the research output of the ARI. We welcome those candidates with interests that match current areas of expertise in the Institute.

The ARI is one of the most productive astronomy centres in the UK, carrying out research in time-domain astrophysics, star formation the structure and stellar content of galaxies and cosmology. The Institute owns and operates as a national facility the 2 metre robotic Liverpool Telescope, sited on La Palma in the Canary Islands, and is also a centre for astronomical instrumentation, e-Science, the lead partner in RoboNet and a consortium partner of e-Merlin. The ARI runs innovative distance learning courses and a joint degree programme with the University of Liverpool which achieved the maximum rating in the last QAA subject review. It is also engaged in major outreach activities principally through the National Schools' Observatory and an astronomical visitors centre Spaceport.

For informal discussions please contact Professor Chris Collins, ARI, +44(0) 151 231 2918, email: cac@astro.livjm.ac.uk

A full CV, together with a statement of research interests and the names of two referees should be sent quoting reference B6857.

No. 21496**Postdoctoral Fellow (Circumstellar Matter)****SPACE TELESCOPE SCIENCE INSTITUTE****Tel:****URL1: <http://www.stsci.edu>*****Attention: Jennifer Serrano, Senior Employment Administrator***

Applications are invited for a postdoctoral research position at the Space Telescope Science Institute starting as early as summer 2005. The successful applicant will work with Dr. Margaret Meixner and collaborators on studies of circumstellar dust shells found around main

sequence stars, pre-main sequence stars, supernovae and evolved stars. This research will involve observations with HST, Spitzer, and ground based facilities. Independent research in related areas will be supported and encouraged. Research experience in the areas of planet formation, star formation, supernovae, evolved stars, dust or radiative transfer is desirable. A PhD in astronomy or astrophysics is required.

The position is for two years, with a possible renewal for a third year. STScI, located on Johns Hopkins University Campus in Baltimore, Maryland, offers an excellent benefit package, 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 428

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 March 1, 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. 21498

Lecturer/Senior Lecturer in Astrophysics (2 posts)

ASTROPHYSICS RESEARCH INSTITUTE, LIVERPOOL JOHN MOORES UNIVERSITY

Rodney House

70 Mount Pleasant

Liverpool, Merseyside L3 5 UX

UK

Tel: +44 (0) 151 231 3519

FAX: +44 (0) 151 231 3191

URL1: <http://www.livjm.ac.uk/about/vacancies>

(Further details and application form)

URL2: <http://www.astro.livjm.ac.uk>

(ARI home page)

URL3: <http://www.livjm.ac.uk>

(LJMU home page)

Email Inquiries: cac@astro.livjm.ac.uk

Attention: Personnel Services

The Astrophysics Research Institute (ARI) seeks to appoint two lecturers to carry out internationally competitive research contributing to one of the Institute's existing areas of

excellence. These posts are part of a major expansion of the ARI involving 5 new academic positions created as a result of expansion and additional funding. It is expected that the appointed candidates will already have a PhD in astronomy or related subject and be established independent researchers with excellent publication records. In addition to research, the appointees will be expected to contribute to other areas of the Institute's activities, namely teaching, astronomical instrumentation or e-Science.

The ARI is one of the most productive astronomy centres in the UK, carrying out research in time-domain astrophysics, star formation, the structure and stellar content of galaxies and cosmology. The Institute owns and operates as a national facility the 2 metre robotic Liverpool Telescope sited on La Palma in the Canary Islands, and is also a centre for e-Science, astronomical instrumentation, the lead partner in RoboNet and a consortium partner of e-Merlin. The ARI runs innovative distance learning courses and a joint degree programme with the University of Liverpool which achieved the maximum rating in the last QAA subject review. It is also engaged in major outreach activities principally through the National Schools' Observatory and an astronomical visitors centre Spaceport.

A full CV, together with a statement of research interests and the names of two referees should be sent quoting reference B6858.

No. 21499

Assistant Research Scientist and Postdoctoral Research positions in Cosmology

JOHNS HOPKINS UNIVERSITY DEPARTMENT OF PHYSICS & ASTRONOMY

Johns Hopkins University

3400 North Charles Street

Baltimore, MD 21218

US

Tel: 410-516-7347

FAX: 410-516-7239

Email Submission Address: cbennett@jhu.edu

Email Inquiries: cbennett@jhu.edu

Attention: Professor C. Bennett

The Center for Astrophysical Sciences at Johns Hopkins University seeks assistant research scientists and/or postdoctoral scholars to assist with cosmic microwave background research in one or more of three separate programs: the Wilkinson Microwave Anisotropy Probe (WMAP) mission, the Legacy Archive for Microwave Background Data Analysis (LAMBDA) data center, and in the hardware development for polarization anisotropy measurements. Research is conducted in close collaboration with the nearby NASAGoddard Space Flight Center.

Applicants must have a Ph.D. in astrophysics or closely related field and relevant research experience. The review of materials will begin immediately and will continue until the positions are filled. Specific questions about the positions may be addressed to Prof. C. Bennett at 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 (hardcopy preferred). JHU encourages applications from women and minority candidates. AAE/EOE

No. 21507

Academic Fellowship in Astrophysics

ASTROPHYSICS RESEARCH INSTITUTE, LIVERPOOL JOHN MOORES UNIVERSITY

Rodney House

70 Mount Pleasant

Liverpool, Merseyside L3 5UX

UK

Tel: +44 (0) 151 231 3519

FAX: +44 (0) 151 231 3191

URL1: <http://www.livjm.ac.uk/about/vacancies>

(Further details and application form)

URL2: <http://www.astro.livjm.ac.uk>

(ARI home page)

URL3: <http://www.rcuk.ac.uk/acfellow>

(Details of Academic Fellowship scheme)

Email Inquiries: cac@astro.livjm.ac.uk

Attention: Personnel Services

The Astrophysics Research Institute (ARI) seeks to appoint an Academic Fellow in astrophysics. The Fellowship is established by Research Councils UK to provide contract research staff with more attractive and stable paths into permanent academic positions and will be held at the ARI. Successful candidates should have an excellent publication record and sufficient postdoctoral experience to demonstrate outstanding research potential. Candidates with research interests in extreme-environment astrophysics (e.g. gamma-ray burts, AGN supernovae, QSOs) are particularly welcome. The nature of the funding provided means that applicants currently holding a personal research fellowship or research grant are eligible to apply. The appointment will last for 5 years after which the University will guarantee a permanent academic position. Those with permanent positions are not eligible to apply.

The ARI is one of the most productive astronomy centres in the UK, carrying out research in time-domain astrophysics, star formation, the structure and stellar content of galaxies and cosmology. the Institute owns and operates as a national facility the 2 metre robotic Liverpool Telescope sited on La Palma in the Canary Islands, and is also a centre foe e-Science, astronomical instrumentation, the lead partner in RoboNet and a consortium partner for e-Merlin. The ARI runs innovative distance learning courses and a joint degree programme with the University of Liverpool which achieved the maximum rating in the last QAA subject review. It is also engaged in major outreach activities principally through the National Schools' Observatory and the astronomical visitors centre Spaceport.

A full CV, together with a statement of research interests and the names of two referees should be sent quoting reference B6859.

No. 21508**Isaac Roberts Fellowship in Astrophysics****ASTROPHYSICS RESEARCH INSTITUTE, LIVERPOOL JOHN MOORES UNIVERSITY****Rodney House****70 Mount Pleasant****Liverpool, Merseyside L3 5UX****UK****Tel: +44 (0) 151 231 3519****FAX: +44 (0) 151 231 3191****URL1: <http://www.livjm.ac.uk/about/vacancies>****(Further details and application form)****URL2: <http://www.astro.livjm.ac.uk>****(ARI home page)****URL3: <http://www.livjm.ac.uk>****(LJMU home page)****Email Inquiries: cac@astro.livjm.ac.uk****Attention: Personnel Services**

The Astrophysics Research Institute (ARI) seeks an enthusiastic research fellow with a good track record and excellent promise in a research area close to the interests of the Institute. This post is part of a major expansion of the ARI involving 5 new academic positions created as a result of additional funding. It is expected that the appointed fellow will have excellent communication skills and contribute to the wider research environment of the Institute. The fellowship is named after the Welsh astronomer Isaac Roberts (1829-1904), who was a pioneer of astro-photography while working locally in Birkenhead and had a long association with Merseyside. This position is fixed term for 3 years in the first instance.

The ARI is one of the most productive astronomy centres in the UK, carrying out research in time-domain astrophysics, star formation, the structure and stellar content of galaxies and cosmology. The Institute owns and operates as a national facility the 2 metre robotic Liverpool Telescope sited on La Palma in the Canary Islands, and is also a centre for e-Science, astronomical instrumentation, the lead partner in RoboNet and a consortium partner of e-Merlin. The ARI runs innovative distance learning courses and a joint degree with the University of Liverpool which achieved the maximum rating in the last QAA subject review. The ARI is also engaged in major outreach activities principally through the National Schools' Observatory and an astronomical visitors centre Spaceport.

A full CV, together with a statement of research interests and the names of two referees should be sent quoting reference B6860.

No. 21528**Assistant Professor in Astronomy****UNIVERSITY OF NEVADA, LAS VEGAS****Tel: 702-895-1655****URL1: <http://hrsearch.unlv.edu/>****(Human Resources Employment Services)****URL2: <http://www.physics.unlv.edu/>****(UNLV Physics Department Information)**

Email Submission Address: hrsearch@ccmail.nevada.edu

Email Inquiries: hrsearch@ccmail.nevada.edu

Attention: Bob Sitts, Manager of Employment and Compensation

The Physics Department at UNLV invites applicants for a full-time, 9-month, tenure-track Assistant Professor in Astronomy starting August 2005. The successful candidate must have a Ph.D. in astronomy or related area from an accredited college of university and is expected to teach effectively at the undergraduate and graduate levels, as well as carry out an active, independent research program. Preference will be given to applicants who primary interest overlaps departmental research areas and who have at least two years post doctoral experience. Current research interests in the astronomy group include cosmology, high energy astrophysics, interstellar medium, galactic astronomy, and star formation. Departmental facilities include a distributed computing laboratory. Las Vegas has easy access to the major astronomical centers in the southwest US. The successful candidate will also be expected to participate in service activities at the department, college and university levels. Additional information about the department may be obtained from our web site, <http://www.physics.unlv.edu/>. Salary competitive; contingent on labor market. Position is contingent upon funding. Start-up funding will be available.

Application details may be obtained by visiting <http://hrsearch.unlv.edu/> .

UNLV is an Affirmative Action/Equal Opportunity educator and employer committed to excellence through diversity.

No. 21534

JUNIOR SCIENTIFIC RESEARCHER (THEORETICAL ASTROPHYSICS)-ID# 24659

RESEARCH CORPORATION OF THE UNIVERSITY OF HAWAII

2530 DOLE ST.

SAKAMAKI HALL, D-100

HONOLULU, HI 96822

USA

Tel: 808-956-3100

FAX: 808-956-5022

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

Attention: NELSON SAKAMOTO, DIRECTOR, HUMAN RESOURCES

The Institute for Astronomy, University of Hawaii in Honolulu, Hawaii invites applications for Non-Regular, Full-Time Postdoctoral position. Perform work on novel techniques to analyze large data sets, particularly megapixel CMB maps & large galaxy surveys. Project also includes development, testing & implementation of new analysis methods, as well as data & simulations. Closing date for this recruitment is: February 28, 2005.

Candidates should have Ph.D. in Astronomy or Physics. Experience in CMB and/or large-scale structure research. Experience in computational methods, data analysis & programming. Knowledge of CMB and/or large-scale structure research. Skill in computational methods, data analysis & programming. Salary commensurate with qualifications.

Prospective candidates are encouraged to call or email Istvan Szapudi (808-956-6196, szapudi@ifa.hawaii.edu) to discuss scientific aspects of the job.

TO APPLY: The preferred method of applying for this job is through our on-line application process. Please go to www.rcuh.com, click on "Employment" and navigate to "Job Announcements/Apply for a Job." However, if you do not have access to the Internet, you may apply by submitting resume; cover letter including ID#, referral source, narrative of your qualifications for position and salary history; names, phone numbers and addresses of three supervisory references and copy of degree(s)/transcripts/certificate(s) to confirm your credentials by fax (808) 956-5022 or mail to Director of Human Resources, Research Corporation of the University of Hawaii, 2530 Dole Street, Sakamaki Hall D-100, Honolulu, HI 96822 before the closing date. EEO/AA Employer

No. 21540

**Postdoctoral Position in Survey Science and Image Processing - LSST Research Fellow
UNIVERSITY OF WASHINGTON**

Department of Astronomy

Box 351580

Seattle, WA 98195

USA

Tel: 206-543-2888

FAX: 206-685-0403

Email Submission Address: office@astro.washington.edu

Email Inquiries: ivezic@astro.washington.edu

Attention: Prof. Zeljko Ivezic, Chair, Search Committee

Applications are invited for a postdoctoral position at the University of Washington starting preferably on July 1, 2005, and no later than Sep 1, 2005, for the duration of three years, pending continuing funding. The responsibilities of this position include work on critical research issues related to the design and construction of image processing pipeline for the Large Synoptic Survey Telescope (www.lsst.org). The successful applicant will be a part of the U.W. LSST design and development group which includes Zeljko Ivezic, Andrew Becker, Suzanne Hawley and Russell Owen, and operates in a close collaboration with LSST research groups led by Chris Stubbs at Harvard University, Robert Lupton at Princeton University, and John Haggerty at Brookhaven National Laboratory. At a minimum, applicants must have a Ph.D. in Astronomy or a closely related field. Experience with image processing, analysis of large data sets and computer science applications in astronomy is preferred, but not necessary.

Please send a 2-page statement of professional qualifications, interests, goals, and accomplishments; a curriculum vitae; bibliography; and the names of three people who will send a letter of reference directly to the Department. Priority will be given to complete applications (with letters) received by March 15, 2005. Documents will be accepted electronically in pdf format sent to office@astro.washington.edu, with subject line "LSST Research Fellow application (your name)".

The University is an Equal Opportunity/Affirmative Action employer.

No. 21561
Chair of Physics and Astronomy Department
UNIVERSITY OF ARKANSAS AT LITTLE ROCK
University of Arkansas at Little Rock
2801 S University Ave
Little Rock, Arkansas 72204-1099
USA
Tel: (501)569-8010
FAX: (501)569-8020
URL1: <http://lepus.physics.ualr.edu/>
Email Submission Address: rmhawk@ualr.edu
Email Inquiries: rmhawk@ualr.edu

Attention: Dr. Roger Hawk, Chair, Physics/Astronomy Search Cmt

Chair, Department of Physics and Astronomy University of Arkansas at Little Rock

The University of Arkansas at Little Rock (UALR) seeks applications for Chair, Department of Physics and Astronomy. Preferred starting date is July 1, 2005. The Department has nine faculty members and offers BS/BA degrees in physics as well as minors in astronomy and physics. Faculty teach 2600 undergraduate and graduate students annually and direct MS and PhD students enrolled in Applied Physics, through the Department of Applied Science. Several retirement positions will be filled in the next few years, giving the new chair an opportunity to stimulate the department in new areas of emphasis that will attract extramural funding. More information about the position is available at <http://lepus.physics.ualr.edu/>. Applications should include curriculum vitae, statements of administrative philosophy and contact information for four references. Review of applications will begin February 15 and continue until the position is filled. Applications should be addressed to Dr. Roger Hawk, Chair, Search Committee, Department of Applied Sciences, ETAS Room 575, University of Arkansas at Little Rock, 2801 S. University Ave., Little Rock, AR 72204-1099. The University of Arkansas at Little Rock is an equal opportunity, affirmative action employer and actively seeks the candidacy of minorities, women and persons with disabilities. Under Arkansas law, all applications are subject to disclosure. Persons hired must have proof of legal authority to work in the United States.

No. 21562
Postdoctoral Fellowship in Active Galactic Nuclei
UNIVERSITY OF MARYLAND, COLLEGE PARK
Astronomy Department
Space Sciences Building
College Park, MD 20742
U.S.A.
Tel: (301) 405 1519
FAX: (301) 314 9067
Email Submission Address: wilson@astro.umd.edu
Email Inquiries: wilson@astro.umd.edu

Attention: Andrew S. Wilson, Professor

Applications are invited for a postdoctoral position involving observational or theoretical work in the general area of active galactic nuclei (AGN) and possibly related objects (such as cooling flows, ULIRGs or "distant" objects, such as identifications of deep field X-ray sources). The preferred observational bands are X-rays (using Chandra and XMM), optical/infrared, or radio line (especially water vapor masers, observed with single dish or VLBI techniques). Familiarity with both the relevant physics and software analysis packages is essential. The University of Maryland has guaranteed observing time at Kitt Peak, equivalent to about 20% of the 4 meter time on Kitt Peak mountain, and projects involving Kitt Peak telescopes are welcome. Willingness to help and work with graduate students is desirable.

Other faculty at the University of Maryland working in the AGN area include C. S. Reynolds and S. Veilleux. The University of Maryland at College Park is close to many major institutes in the Baltimore-Washington area with astronomical departments or programs, including the Space Telescope Science Institute, Johns Hopkins University, NASA Goddard Space Flight Center, Naval Research Laboratory, and the U.S. Naval Observatory. The National Radio Astronomy Observatory and University of Virginia, in Charlottesville, VA, are about 2 hours drive away. Excellent possibilities exist for interaction with the many astronomers working in extragalactic astronomy, including the X-ray astronomy group at the nearby Goddard Space Flight Center.

This research fellowship will be for one year initially and is renewable annually for up to three more years contingent on performance and funding. Applicants must have a Ph. D. degree in astronomy or physics and should mail to Prof. Wilson a curriculum vitae, a description of their research plans within the range of areas described above, and should arrange for three letters of recommendation to be sent. Applications received before March 1 2005 will be assured of full consideration. Salary is negotiable. EOE/AEE.

No. 21563

Postdoctoral Scholar in Laboratory for Adaptive Optics

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

UCO/Lick Observatory

1156 High Street

Santa Cruz, CA 95064

USA

Tel: 831.459.2991

FAX: 831.459.5244

URL1: <http://lao.ucolick.org>

URL2: <http://www.ucolick.org>

Email Submission Address: jacky@ucolick.org

Attention: Joseph Miller, Director

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

UCO/LICK OBSERVATORY Laboratory for Adaptive Optics

Postdoctoral Scholar

The University of California Observatories/Lick Observatory invites applications for a

postdoctoral scholar position in the Observatory's Laboratory for Adaptive Optics (LAO). Contingent on the availability of funding, the appointment will be for two years beginning March 1, 2005 (start date negotiable). The appointment may be extended for up to two additional years if funds allow. The LAO is a new research and teaching facility for the development of adaptive optics technology for ground-based astronomical observatories. The Laboratory is a component of the UCO/Lick Observatory, headquartered on the University of California's Santa Cruz campus, and is affiliated with the NSF Center for Adaptive Optics, also headquartered at Santa Cruz. Experiments within the Laboratory will test new technologies and establish techniques that will be used in complex adaptive optics systems on the next generation of large astronomical telescopes. The appointee will design and perform optical bench experiments to test concepts in the design of adaptive optics systems and related subsystems; plan and perform data analysis from laboratory testbed experiments; and aid in subsequent construction and commissioning of adaptive optics instruments. Preference will be given to candidates with experience in testing and building optical astronomical instruments.

RANK: Postdoctoral Scholar

SALARY: \$40,512 - \$46,056, dependent upon experience and qualifications.

MINIMUM QUALIFICATIONS: PhD or equivalent in Astronomy, Physics, or Engineering. Candidates should have experience in mathematical modeling, complex simulations, and analytical reasoning. Candidates should demonstrate experience in laboratory experiment planning, execution, and data analysis. Candidates should demonstrate the ability to present results in published work and in conference presentations, should have knowledge geometric and diffractive optics, and have a familiarity with optical components and optical laboratory equipment. Candidates should have the ability to work as part of a multidisciplinary team. Familiarity with adaptive optics systems and components and a familiarity with astronomical instruments (telescopes, cameras, spectrographs) is desirable.

TERM OF APPOINTMENT: Two years, contingent on the availability of funding. The appointment may be renewed for up to two additional years, contingent on positive performance evaluation and availability of funds.

POSITION AVAILABLE: March 1, 2005 (start date negotiable).

APPLY TO: Applicants should send a vita, publication list, brief (one- to two-page) summary of relevant experience and plans, and the names of three referees who have been asked by the applicant to submit letters of recommendation (all letters will be treated as confidential documents, please direct referees to the UCSC Confidentiality Statement at <http://www2.ucsc.edu/ahr/policies/confstm.htm>) to:

Postdoctoral Scholar Recruitment c/o UCO/Lick, Office of the Director University of California
1156 High Street Santa Cruz, CA 95064 Please refer to position LAO/PD in your reply.

CLOSING DATE: This position is open until filled. Applications will first be considered on February 15, 2005.

URLs for more information: Laboratory for Adaptive Optics website: <http://lao.ucolick.org>
UCO/Lick Observatory website: <http://www.ucolick.org>

UCSC IS AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER
WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY

No. 21564

Postdoctoral Scholar in Adaptive Optics Systems for Astronomy

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

UCO/Lick Observatory

1156 High Street

Santa Cruz, CA 95064

USA

Tel: 831.459.2991

FAX: 831.459.5244

URL1: <http://cfao.ucolick.org>

URL2: <http://ucolick.org>

Email Submission Address: jacky@ucolick.org

Attention: Joseph Miller, Director

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

C E N T E R F O R A D A P T I V E O P T I C S P o s t d o c t o r a l S c h o l a r

The Center for Adaptive Optics (CfAO) and the Laboratory for Adaptive Optics (LAO) invites applications for a non-ladder-rank position in analysis and modeling of the next generation of adaptive optics systems for astronomy in the CfAO. Contingent on the availability of funding, the appointment will be for two years beginning March 2005 (start date negotiable). The appointment may be extended to three years if funds allow. The CfAO, a Science and Technology Center funded by the National Science Foundation, brings together researchers from around the nation and is headquartered at the University of California's Santa Cruz campus. The Center sponsors collaborative research projects in the fields of astronomy and vision science to remove the effects of image blurring through turbulent media. Applications include astronomical telescopes, laser guide stars, wavefront sensing, micro electromechanical systems (MEMS) technology, and retinal imaging. The CfAO has close proximity to the headquarters of the UCO/Lick Observatory and its facilities, including the new Laboratory for Adaptive Optics. The appointee will perform analysis, design, and modeling of adaptive optics systems and related subsystems, with an emphasis on designing adaptive optics instruments for the next generation of large astronomical telescopes. The appointee will also perform experiment planning and data analysis for experiments in the LAO and with the laser guide star adaptive optics system on the Lick Observatory 3-meter Telescope at Mount Hamilton. Preference will be given to candidates with demonstrated experience in mathematical modeling, complex simulations, and analytical reasoning.

RANK: Postdoctoral Scholar

SALARY: \$40,512 - \$43,908, dependent upon experience and qualifications.

MINIMUM QUALIFICATIONS: PhD or equivalent in Astronomy, Physics, Mathematics, or Engineering. Candidates should have experience in mathematical modeling, complex simulations, and analytical reasoning. Candidates should demonstrate ability to present results

in published work and in conference presentations, have knowledge of Fourier and wave optics, and an understanding of numerical linear algebra and statistical analysis methods (e.g., Bayesian minimum-variance analysis. Candidates should have a strong proficiency with scientific computing tools (e.g., IDL, Matlab, Mathematica, etc.) and the ability to work as part of a multidisciplinary team. Familiarity with adaptive optics systems and components and with astronomical or equivalent optical instruments (telescopes, cameras, spectrographs) is desirable.

TERM OF APPOINTMENT: Two years, contingent on the availability of funding. The appointment may be renewed for one additional year, contingent on positive performance evaluation and availability of funds.

POSITION AVAILABLE: March 1, 2005 (start date negotiable).

APPLY TO: Applicants should send a vita, publication list, brief (one- to two-page) summary of relevant experience and plans, and the names of three referees who have been asked by the applicant to submit letters of recommendation (all letters will be treated as confidential documents, please direct referees to the UCSC Confidentiality Statement at <http://www2.ucsc.edu/ahr/policies/confstm.htm>) to:

Postdoctoral Scholar Recruitment c/o UCO/Lick, Office of the Director University of California
1156 High Street Santa Cruz, CA 95064 Please refer to position CfAO/PD in your reply.

CLOSING DATE: This position is open until filled. Applications will first be considered on February 15, 2005.

URLs for more information: Center for Adaptive Optics website: <http://cfao.ucolick.org>
UCO/Lick Observatory website: <http://www.ucolick.org>

No. 21571

Postdoctoral Researcher

COLUMBIA UNIVERSITY

Department of Physics

550 W 120th Street, Mail Code 5247

New York, NY 10027

Tel: 212-854-4987

FAX: 212-854-8121

URL1: <http://calvin.phys.columbia.edu/>

(Miller Group Web Site)

Email Submission Address: amber@calvin.phys.columbia.edu

Attention: Amber Miller, Assistant Professor

The experimental cosmology group in the Physics Department at Columbia University invites applications for a postdoctoral researcher in experimental cosmology. The successful candidate will develop instruments to measure polarization in the Cosmic Microwave Background (CMB). Applicants should have experience in experimental astrophysics or a related field and a research interest in cosmology. Needs of this project include cryogenic receiver technology, optical and electrical design, microwave engineering, computer

programming, and CMB data analysis. Preference will be given to candidates with related experience.

All applicants should send an application including a CV, publication list, description of research interests, and arrange for the submission of three letters of recommendation by February 15, 2005, although applications will be accepted until the positions are filled. Columbia University is an equal opportunity/affirmative action employer, women and minorities are encouraged to apply.

For further information, please contact Prof. Amber Miller (contact details above)

New Jobs This Month

No. 21520

SALT Astronomers

SOUTH AFRICAN ASTRONOMICAL OBSERVATORY

Observatory Road

Observatory

Cape Town, Western Cape 7935

South Africa

Tel: +27 21 447 0025

FAX: +27 21 447 3639

URL1: <http://www.sao.ac.za>

(South African Astronomical Observatory)

URL2: <http://www.salt.ac.za>

(SALT)

Email Submission Address: linda@sao.ac.za

Email Inquiries: dibnob@sao.ac.za

Attention: Ms Linda Tobin, Human Resources Officer

The South African Astronomical Observatory (SAAO) requires astronomers dedicated to supporting the astronomical operations of the Southern African Large Telescope (SALT) – a 10-m class optical/near IR telescope – due for completion in early 2005. SALT is based near Sutherland, some 380 km inland from the SAAO headquarters in Cape Town.

The applicants should hold a PhD and have some postdoctoral experience in observational astronomy and data reduction. In addition, instrumental and/or software expertise would be an advantage. The latter might include experience in writing web based and Java software, using astronomical data reduction packages (e.g. IRAF) and maintaining web based information pages and software. SALT Astronomers will be based in Cape Town, but will be expected to regularly conduct service observing (e.g. one week in six) on SALT, which is a queue-scheduled telescope. SALT related duties consist of preparing, scheduling and carrying out of observations on behalf of the SALT users, performing on-line and pipeline data analysis, writing software and liaising with users who will be interacting with the SALT Operations Team over the Internet. A generous amount of personal research time and resources, using SALT and other SAAO facilities, will also be available.

The SA positions will initially be for a period of three years, with the possibility of extensions or

permanent appointments thereafter. The salary package will be commensurate with qualifications and experience. Interested applicants should contact the above for further particulars and details on how to apply. Completed applications must be received no later than 31 March 2005.

No. 21566
SAO Predoctoral Fellowship 2005
SMITHSONIAN ASTROPHYSICAL OBSERVATORY
60 Garden Street, Mail Stop 47
Cambridge, MA 02138
United States
Tel: 617-495-7103
URL1: <http://cfa-www.harvard.edu/predoc/>
Email Inquiries: predoc@cfa.harvard.edu

Attention: Coordinator, Fellowship Committee

The Smithsonian Astrophysical Observatory announces the availability of predoctoral fellowships beginning in July 2005, designed to allow students from other institutions throughout the world to do their thesis research at SAO. A wide variety of research projects may be proposed, with about 300 SAO scientific staff available as research advisors (see <http://www.si.edu/ofg/Units/sorssao.htm> for a complete list of potential advisors). Applicants should directly contact Smithsonian scientists in their areas of interest to discuss possible research topics (see <http://www.cfa.harvard.edu/predoc/researchers.html> for a partial list of available research topics). Applicants must be ready to begin dissertation research at the time of the award.

Fellowships are awarded for one year at a time with possible renewal up to three years, contingent upon funding. Stipends will be \$25,200 for the coming year. Funds are also provided for health benefits and relocation expenses. Applications are due by April 15, 2005.

Application forms and instructions are available at: <http://cfa-www.harvard.edu/predoc/>

We are an Equal Opportunity/Affirmative Action Employer; all qualified applicants receive consideration for employment without regard to race, creed, color, sex or national origin.

No. 21567
Center for Integrated Space Weather Modeling Education Coordinator
BOSTON UNIVERSITY
Center for Integrated Space Weather Modeling
725 Commonwealth Avenue
Boston, MA 02215
USA
Tel: 617-353-2471
FAX: 617-358-3242
URL1: <http://www.bu.edu/cism>
(CISM Website)
Email Submission Address: hughes@bu.edu
Email Inquiries: hughes@bu.edu

Attention: W. Jeffrey Hughes, Director

CISM Education Coordinator

The Center for Integrated Space Weather Modeling (CISM), an NSF Science and Technology Center (STC) led by Boston University, seeks an Education Coordinator. The Education Coordinator will be responsible for the coordination of all CISM education programs.

CISM conducts research and education with the principal goal of understanding the behavior of the Sun-Earth system through the development and use of physics-based numerical models. Information on CISM, which involves 10 institutions, may be found at: <http://www.bu.edu/CISM>. The four CISM education program components focus on a graduate/professional summer school, graduate student professional development, undergraduate research and mentoring, and grade 6-14 education and science literacy. The education coordinator will coordinate the entire CISM education program to promote efficiency, effectiveness, and synergy. He/she will lead the undergraduate education component, and play an active role in the other components. He/she will act as a spokesperson for the CISM education program, interact with counterparts in other NSF-sponsored research centers, and help promote diversity within CISM.

The successful candidate will be a scientist with substantial education experience and a strong interest in undergraduate education and mentoring. Administrative or management experience will be an advantage. The successful candidate will be appointed to a position commensurate with his/her experience and education.

Inquiries and applications, which should include a curriculum vitae, bibliography, and the names and addresses (including e-mail) of three people willing to write letters of reference, should be sent to the Director of CISM: Professor W. Jeffrey Hughes, Department of Astronomy, Boston University 725 Commonwealth Avenue, Boston, MA 02215, USA. Telephone: 617-353-2471 E-mail: hughes@bu.edu.

Applications received by March 4, 2005 will receive full consideration.

Boston University is an equal opportunity/affirmative action employer. We encourage applicants from women and underrepresented minorities.

No. 21568**Two Postdoctoral Positions in Computational Astrophysics at the University Munich
UNIVERSITY OBSERVATORY MUNICH****Scheinerstr. 1****Muenchen, Bayern D-81679****Germany****Tel: +49 89 2180 5992****FAX: +49 89 2180 6003****URL1: <http://www.usm.uni-muenchen.de/CAST/>****(Computational Astrophysics)****URL2: <http://www.usm.uni-muenchen.de>****(University Observatory Munich)****Email Submission Address: andi@usm.uni-muenchen.de**

Email Inquiries: andi@usm.uni-muenchen.de

Attention: Andreas Burkert, Prof.

The Institute of Astronomy (University Observatory) at the Ludwig-Maximilians University Munich (USM) invites applications for two postdoctoral positions in computational astrophysics. We are particularly interested in candidates with a strong expertise and interest in galactic dynamics and galaxy formation/evolution. The computational astrophysics group at USM (see <http://www.usm.uni-muenchen.de/CAST>) is pursuing a variety of astrophysical research topics, including the structure, formation and evolution of galaxies, the evolution of a multi-phase interstellar medium, the formation of stars and stellar clusters, and planet formation. In addition, in a joint collaboration with the Astronomical Recheninstitut (ARI) in Heidelberg and the University of Mannheim we are designing special purpose hardware boards for collisional Nbody dynamics and SPH simulations. One postdoctoral position (appointment period: 3 years) will join this team and will be expected to participate in the development of SPH-Nbody codes using special purpose hardware as well as to perform exceptionally high-resolution Nbody-SPH simulations in the field of galaxy interactions and the morphological transformation of galaxies. The second position will be initially for two years with a possible extension for a third year. It is targeted toward persons with special interest and expertise in stellar dynamics, galactic structure and evolution although any candidate with strong expertise in computational astrophysics and an outstanding research record will be considered.

Applicants should submit a curriculum vitae, including a list of publications and scientific accomplishments, plus a statement of current research interests and plans. In addition, the applicant should arrange for at least two letters of reference in support of the application. The application should be sent by March, 6th to

Professor Andreas Burkert, University Observatory Munich, Scheinerstr. 1, D-81679 Munich, Germany.

AA/EOE

No. 21569
Postdoctoral Researcher in Laboratory Astrophysics
WASHINGTON UNIVERSITY IN ST. LOUIS
Washington U.
1 Brookings Dr
St Louis, MO 63130
USA
Tel: 314-935-7440
FAX: 314-935-7361
Email Submission Address: hofmeister@wustl.edu
Email Inquiries: hofmeister@wustl.edu

Attention: Anne Hofmeister, Research Prof.

A 2-year postdoctoral position is available in laboratory astrophysics in the Department of Earth and Planetary Sciences, Washington University, 1 Brookings Dr., St. Louis, MO 63130,

starting as early as April 2005.

The successful applicant will work with Prof. Anne Hofmeister in making laboratory measurement of IR reflectivity spectra from single-crystals, ceramics, and glasses of various compositions from about 4 to 800 K to distinguish temperature, grain-size, and sampling effects. Through collaboration with Prof. Angela Speck at U. Missouri, Columbia, the applicant will apply the data against available ISO and Spitzer data.

A background in Infrared Astronomy is essential, as is an interest in either circumstellar/interstellar dust or the late stages of stellar evolution. Additional interest in mineralogy and/or spectroscopy would be useful. The annual starting salary for a new or recent Ph.D. is \$33,000. A Ph.D. in astronomy/astrophysics is required. For inquiries about the position send an email to hofmeist@wustl.edu.

Interested applicants should send a CV, publication list and a statement of research interests by March 31, 2005, in order to ensure full consideration. Send applications and request that three letters of support be sent directly to Prof. Anne Hofmeister (address above). Women and minorities are encouraged to apply. Applications will be accepted until the position is filled.

No. 21570

Assistant Professor – Chemistry & Physics (Astronomy)

COASTAL CAROLINA UNIVERSITY

P.O. Box 261954

Conway, SC 29528

USA

Tel:

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

Attention: Dr. Dennis Dinge, Department of Chemistry and Physics

Assistant Professor – Chemistry & Physics (Astronomy)

The Department of Chemistry and Physics at Coastal Carolina University invites applications for a tenure track position in Physics to begin Fall semester of 2005. Ph.D. required. The successful candidate for this position will have a demonstrated interest in and commitment to innovative methods of undergraduate astronomy and physics teaching. Preference will be given to candidates with ability to teach undergraduate and non-majors astronomy. Additional teaching assignments will be in both lower and upper division Physics.

The Department offers a minor in Physics, but plans are underway to implement a major in Applied Physics in the coming years. Faculty are expected to participate in research, especially involving undergraduates. Current faculty research interests include astrophysics, physical oceanography, atmospheric physics, and surface physics. There is ample opportunity for collaborative work with the Departments of Chemistry, Marine Science, Biology and Applied Mathematics.

Coastal Carolina University is a growing, state-supported liberal arts institution where the emphasis is on undergraduate education, and growing importance is placed on faculty mentored student research projects and public services. Coastal Carolina University is located

approximately nine miles from Myrtle Beach, South Carolina and enrolls more than 7,000 students. For more information on the University or Department, consult our web page at www.coastal.edu .

To ensure full consideration, please submit letter of application, vita, statement of research and teaching interests, and arrange to have three letters of reference sent by March 1, 2005 to: Dr. Dennis Dinger, Department of Chemistry and Physics, Coastal Carolina University, P.O. Box 261954, Conway, SC 29528-6054.

Coastal Carolina University is committed to EO/AA employer.

No. 21573

Postdoctoral Position in Planetary Atmospheres

UNIVERSITY OF FLORIDA

University of Florida

P.O. Box 118440

Gainesville, FL 32611

USA

Tel: (352) 392 0286

FAX: (352) 392 8743

URL1: <http://www.phys.ufl.edu>

Email Submission Address: katia@phys.ufl.edu

Email Inquiries: katia@phys.ufl.edu

Attention: Katia Matcheva, Prof.

The Department of Physics at the University of Florida invites applications for a postdoctoral research position in the field of planetary atmospheres. The successful candidate will work on the analysis and interpretation of infrared spectra from Saturn and Jupiter collected by the Cassini infrared spectrometers. The position is available for two years and could be extended subject to the availability of funds. A PhD in Planetary Sciences, Physics, Astronomy, or a related field is required. Research experience in atmospheric radiative transfer and atmospheric dynamics is highly desirable. Salary will depend on background and experience. The starting date can be as early as the summer of 2005. Each application should include a curriculum vitae, a list of publications and a brief statement of research interests. Candidates should also arrange for three letters of recommendation to be sent to Prof. Katia Matcheva, Department of Physics, University of Florida, P.O. Box 118440, Gainesville FL 32611-8440. Informal inquiries about the position can be made to katia@phys.ufl.edu. Review of applications will start March 15, 2005. Women and underrepresented minorities are strongly encouraged to apply. The University of Florida is an Equal Opportunity Employer.

No. 21574

post-doctoral research assistant position in high-resolution stellar abundance analysis

UNIVERSITY OF NORTH CAROLINA

141 Phillips Hall, CB 3255

Chapel Hill, NC 27599

USA

Tel: 919-962-3019

FAX: 919-962-0480

Email Submission Address: bruce@physics.unc.edu

Attention: *Dr. Bruce W. Carney, Samuel Baron Prof, Sr. Assoc. Dean*

A post-doctoral research assistant position, in high-resolution stellar abundance analysis, will be available at the University of North Carolina at Chapel Hill beginning in mid-2005. The exact starting date may be negotiated, and the term is for two years, with possible renewal for a third year.

The position allows for independent research for about one third of the time, and will include access to UNC's 17% share of the observing time on the 4.1-meter SOAR telescope, which will see regular operations in 2005, as well as access to our smaller share of the observing time on the 10.5-meter SALT telescope, which will be dedicated in late 2005, and access to the PROMPT array of six small robotic photometric telescopes in Chile.

The primary duty will include elemental abundance determinations of red giant and horizontal branch stars in globular clusters to support a Key Project for NASA's SIM mission. While the position is based at UNC in Chapel Hill, the successful applicant will collaborate extensively and visit with Dr. Andrew McWilliam (OCIW) in Pasadena. Spectra have already been acquired using the Magellan 6.5m telescopes for the project, but more data acquisition is anticipated. The SIM program also includes field RR Lyraes as part of the overall goals, and the secondary duty will be spectroscopic determinations of the chemical compositions of the targets identified for SIM.

Applicants should send copies of a CV, a list of publications, and the names of three references to Dr. Bruce W. Carney, Department of Physics & Astronomy, University of North Carolina, Chapel Hill, NC 27599-3255. Women and minorities are encouraged to apply.

No. 21575

Postdoctoral position, clusters of galaxies

OHIO UNIVERSITY

Astrophysical Institute and Dept. of Physics & Astronomy

Clippinger Labs

Athens, OH 45701

USA

Tel: 740-593-0063

FAX: 740-593-0433

Email Submission Address: mcnamarb@ohio.edu

Email Inquiries: mcnamarb@ohio.edu

Attention: *B.R. McNamara, Professor*

Applications are invited for a postdoctoral appointment in astrophysics affiliated with the Astrophysical Institute and Department of Physics & Astronomy at Ohio University. The research concerns the analysis of X-ray, optical, and radio observations of galaxy clusters. The appointment will be one to two years in duration, but a longer appointment may be possible if funding allows. The institute has excellent computer and telescope facilities, including partnership in the MDM Observatory on Kitt Peak, AZ. The appointee will be eligible to

compete for time on the 2.4-m Hiltner telescope and 1.2-m McGraw Hill telescope on Kitt Peak. The institute is a partner in a \$1.4 million research initiative to explore the structure of the Universe on all scales, and the department expects to hire three new faculty members in the near future to propel this initiative. The Astrophysical Institute includes nine faculty members, eleven graduate students, and six undergraduates. Their research interests include clusters of galaxies, galactic dynamics, emission-line galaxies, supermassive black holes, active galactic nuclei, nuclear astrophysics, and planetary physics. A Ph.D. in astronomy or physics is required. The applicant should send a curriculum vitae, a publication list, a brief research statement, and arrange for three letters of reference to be sent to Prof. Brian McNamara. To receive full consideration, all application material should be received by March 15, 2005. Applications may be sent by post or email to mcnamarb@ohio.edu .

No. 21577

Research Scientist in Radio Astronomy

UNIVERSITY OF ILLINOIS

University of Illinois

1002 W Green St

Urbana, IL 61801

USA

Tel: 1 (217) 333-9581

FAX: 1 (217) 244-7638

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

(Illinois Astronomy Department)

URL2: <http://www.mmarray.org>

(CARMA)

Email Submission Address: crutcher@uiuc.edu

Email Inquiries: crutcher@uiuc.edu

Attention: Richard Crutcher, Professor

The Laboratory for Astrophysical Imaging (LAI) in the Department of Astronomy at the University of Illinois at Urbana-Champaign (UIUC) seeks applications for a Research Scientist position. This is a 12-month academic professional research position with full benefits and indefinite term, subject to satisfactory performance and availability of funds. We are seeking an astronomer with observational or instrument development expertise whose interests complement science using the CARMA array.

The CARMA array is a millimeter-wave interferometer formed from the merger of the BIMA, OVRO, and SZA arrays. CARMA is operated in collaboration with Caltech, UC Berkeley, Maryland, and Chicago. First light for CARMA is expected in late 2005. CARMA will operate from 30 to 270 GHz with a resolution to about 0.1 arcsecond at the higher frequencies. Its sensitivity at 230 GHz will be about a factor of ten better than the BIMA array.

The duties of this position will include conducting astronomy research with CARMA and publishing the results in referred journals, assisting in the preparation of proposals for external financial support for UIUC participation in CARMA, assisting in operation of the telescope on site in California, providing consulting to UIUC astronomers on problems of observing and data processing, and carrying out other duties related to CARMA as assigned by the Director of the LAI.

The successful applicant must have a Ph.D. in Astronomy or a closely related field, a minimum of 3 years experience with using radio synthesis techniques for astronomy research, a strong background in publishing astronomy research in referred journals, and have experience with radio astronomy synthesis imaging software, especially MIRIAD. Salary is commensurate with experience. Proposed starting date is 1 July 2005, or by mutual agreement.

Applicants should send a curriculum vitae, list of publications, statement of research interests, and request at least three references to submit letters of recommendation to: Research Scientist Search c/o: Professor Richard Crutcher, Department of Astronomy, 1002 W. Green St., Urbana, IL 61801

Applications must be received by March 31, 2005 to receive full consideration. Minorities and women are particularly encouraged to apply. UIUC is a AA-EOE employer.

No. 21578

Software Engineer / Scientist

UNIVERSITY OF CHICAGO

5640 S. Ellis Ave.

LASR 111

Chicago, IL 60637

USA

Tel: 773 834 9786

FAX: 773 834 1891

Email Submission Address: spadin@uchicago.edu

Email Inquiries: spadin@uchicago.edu

Attention: Stephen Padin, Senior Scientist

The University of Chicago is seeking a Scientist / Software Engineer to write control and data analysis software for the South Pole Telescope (SPT) and to participate in the analysis of the scientific data. The SPT is a 10-m diameter, off-axis, submillimeter telescope, equipped with a large bolometer array receiver. It will be deployed at the Amundsen-Scott South Pole Station in November 2006. The principal science goals of the project are a deep survey of galaxy clusters, and measurements of the angular power spectrum and polarization of the cosmic microwave background radiation. The SPT is a collaboration between the University of Chicago, the University of California Berkeley, the University of Illinois at Urbana-Champaign, Case Western Reserve University, and the Smithsonian Astrophysical Observatory.

The Scientist / Software Engineer will be responsible for the SPT control and monitoring software, and for interfaces to receiver computers, building on the extensive telescope experience of the SPT group. The successful candidate must work as part of a design team, maintaining collegial and collaborative working relationships with scientists and engineers at several institutions. Good communication skills, an ability to write clear documentation, and efficient work organization are important. The principal duties are to design, write, document, test and maintain C and C++ programs for instrument control, data acquisition, and data analysis, and to participate in laboratory and field testing of the major subsystems of the SPT. Required qualifications are a Bachelor degree in physics, astronomy or computer science (higher degree preferred), a minimum of 2 years of software experience in a scientific or technical organization, and a working knowledge of C, C++, and data acquisition systems. A

background in radio astronomy would be an advantage.

Applications must be submitted at <https://jobopportunities.uchicago.edu> for position 068234.

No. 21580

Assistant Professor in Experimental High-Energy Neutrino Astrophysics

UNIVERSITY OF MINNESOTA-DULUTH

1023 University Drive

Duluth, MN 55812

USA

Tel: 218-726-7594

URL1: <http://www.d.umn.edu/physics/search.htm>

(Search web page)

URL2: <http://www.d.umn.edu/physics>

(Department web site)

Email Submission Address: jhiller@d.umn.edu

Email Inquiries: jhiller@d.umn.edu

Attention: John R. Hiller, Search Committee Chair

The Department of Physics at the University of Minnesota-Duluth invites applications for a tenure-track assistant professorship in experimental high energy neutrino astrophysics. The start date is August 29, 2005. A Ph.D. in Physics or equivalent and research experience in experimental high energy physics or particle astrophysics are required. Some postdoctoral research experience in these same areas, preferably with neutrinos, and college-level teaching experience in physics beyond conventional TA duties are desired. We seek candidates who can teach effectively at all levels. Recruitment and supervision of undergraduate and graduate students in research is expected, as is success in obtaining external funding. Salary is competitive; start-up funds will be available. For more information about the department, go to <http://www.d.umn.edu/physics>. To apply, send a letter of application, cv, publication list, and descriptions of research and teaching experience and interests, and arrange for three letters of reference to be sent directly to:

Physics Search Committee Chair, Department of Physics, 371 MWAH, University of Minnesota Duluth, 1023 University Drive, Duluth, Minnesota 55812 USA.

Review of completed applications will begin on March 15, 2005.

The University of Minnesota is an equal opportunity educator and employer.

No. 21581

Postdoctoral Research Positions in Astrophysics

CARNEGIE MELLON UNIVERSITY

Department of Physics

pittsburgh, PA 15213

United States

Tel: 412-268-8717

FAX: 412-681-0648

URL1: <http://astrophysics.phys.cmu.edu/>

Email Submission Address: tiziana@lemo.phys.cmu.edu
Email Inquiries: tiziana@lemo.phys.cmu.edu, rcroft@cmu.edu

Attention: Tiziana Di Matteo, Professor

Applications are invited for 2 postdoctoral research associate positions in astrophysics and cosmology at Carnegie Mellon University. The candidates should have a PhD in astronomy and/or astrophysics and experience in the study of extragalactic astrophysics and/or cosmology.

The Carnegie Mellon Astrophysics group includes faculty members Tiziana Di Matteo (arriving Jan 2005), Richard Griffiths, Jeff Peterson, Rupert Croft, and research faculty Takamitsu Miyaji. The department is 5 minutes walk from the Physics and Astronomy department at the neighboring University of Pittsburgh.

Applicants should submit a curriculum vitae, a publication list, a brief description of research interests, and arrange for three letters of reference to be sent directly to Tiziana Di Matteo at the above address. One position is directly associated with Prof. Di Matteo and the appointment is initially for 1 year, with likely renewal for another 2 years. The other appointment is initially for 1 year, with likely renewal for a second year. Both positions have a nominal start date of September 2005, although earlier dates are possible. Informal inquiries are welcome. Consideration of applications will begin on February 15th, and will continue until the positions are filled.

Carnegie Mellon University is an equal opportunity/affirmative action employer.

No. 21582
Control Systems Engineer - NPOI, Flagstaff, Arizona
INTERFEROMETRICS, INC
14120 Parke Long Court, #113
Chantilly, VA 20151-1646
USA
Tel:
FAX: 703-227-8405
URL1: <http://www.interf.com>
(Interferometrics, Inc.)
Email Submission Address: resumes@interf.com
Email Inquiries: resumes@interf.com

Attention: Eric Wetzel, Technical Coordinator

Control Systems Engineer CSE-7204

Job Description: Interferometrics Inc. is seeking an electrical or mechanical engineer to lead in the design and implementation of control systems for alignment and data acquisition & control at the Naval Prototype Optical Interferometer (NPOI) site in Flagstaff, Arizona.

Analysis of prototype opto-mechanical systems and components, including servo systems; design, implementation and troubleshooting control algorithms, including understanding the impact of latencies in feedback loops; familiarity with control systems for a variety of devices (stepper motors, dc motors, high voltage piezos, voice coils, etc.); and familiarity with a variety of communications protocols such as Ethernet, PCI-I/O, RS232, RS485 is essential.

Necessary hardware skills include demonstrated experience in piezo-electric servo controls and/or motor servo controls with digital and analog circuitry. Candidate must possess software experience in Windows, LINUX, C or C++, and GUI-based control programs such as LABVIEW. Knowledge of VxWorks, MATLAB (or equivalent), and experience writing drivers for devices is desirable.

U.S. Citizenship is essential to qualify for this position. Masters Degree in Electrical or Mechanical Engineering with 5 years hands-on experience is required. The job site is in Flagstaff, AZ. However, travel to Washington, D.C. will be required.

See our website at www.interf.com

No. 21583

Postdoctoral Associate in X-ray Astronomy

HARVARD UNIVERSITY

Center for Astrophysics

60 Garden Street MS-46

Cambridge, MA 02138

USA

Tel: +1-617-495-3752

FAX: +1-617-495-7105

URL1: <http://cfa-www.harvard.edu>

Email Submission Address: jclee@cfa.harvard.edu

Email Inquiries: jclee@cfa.harvard.edu

Attention: Peggy Herlihy, Department Administrator

Applications are invited for a position as a postdoctoral associate at the Center for Astrophysics, Harvard University, to work with Dr. Julia Lee on a research program involving spectral studies of energetic accretion systems, Galactic and extragalactic. The work will focus primarily on determining the plasma conditions of these systems using high resolution X-ray spectra taken with the Chandra HETGS, but will likely also involve broad band studies with HST, FUSE, RXTE and ground-based instruments. Research projects will center on plasma diagnostics of circum-source material and accretion disk environments close to the black hole. Other research topics may be available, depending on the interest and experience of the appointee.

Candidates must possess a PhD in physics or astrophysics at time of appointment. Demonstrated experience in spectral analysis is desired, but not required. Applicants should be skilled at oral and written communication. This position will be offered for an initial period of one year, with an extension to a second and third year subject to performance; the expected start date is fall-2005.

Interested candidates should send a curriculum vitae, list of publications and statement of research interests to Dr. Julia Lee, c/o Ms. Peggy Herlihy at the above address, and should arrange to have letters of recommendation sent by three professional scientists familiar with the candidate's research. The closing date for applications will be 1 April 2005. Further information can be obtained via email to Julia Lee at jclee@cfa.harvard.edu

No. 21584**Research Associate in Observational Cosmology****BROWN UNIVERSITY****Department of Physics/Box 1843****Providence, RI 02912****USA****Tel: 401-863-1441****FAX: 401-863-3359****URL1: <http://astro.physics.brown.edu>****Email Submission Address: tucker@physics.brown.edu****Email Inquiries: tucker@physics.brown.edu*****Attention: Prof. Greg Tucker***

We invite applications for a position as a research or senior research associate in the observational cosmology group. The successful candidate will participate in the Balloon-borne Large Aperture Submillimeter Telescope (BLAST) and/or the E and B Experiment (EBEX), a new instrument to measure the polarization of the cosmic microwave background. Applicants should have experience in one or more of the following areas: bolometers, cryogenics, data analysis, low-noise electronics, microwave/optical design, scientific ballooning. Applicants should have a Ph.D. in physics or a related field prior to starting this position. Candidates should send a letter of application, a curriculum vitae and three letters of recommendation to Prof. Greg Tucker, Department of Physics, Box 1843, Brown University, Providence, RI 02912. Applications received by April 1, 2005 will receive full consideration. For more information please visit <http://astro.physics.brown.edu>. Brown University is an affirmative action/equal opportunity employer. Women and minorities are encouraged to apply.

No. 21585**HIGH ENERGY EXTRAGALACTIC ASTRONOMER****JOHNS HOPKINS UNIVERSITY****3701 San Martin Drive****Dept. of Physics and Astronomy****Baltimore, Maryland 21218****USA****Tel: 410-516-8649****FAX: 410-516-5096****Email Submission Address: yaqoob@pha.jhu.edu****Email Inquiries: yaqoob@pha.jhu.edu*****Attention: Dr. Tahir Yaqoob, Dr.***

HIGH ENERGY EXTRAGALACTIC ASTRONOMER

The Johns Hopkins University Center for Astrophysical Sciences seek a scientist to work with Dr. James Reeves at the Goddard Space Flight Center's Laboratory for High Energy Astrophysics. The successful candidate will work on data from high energy observations of extragalactic sources (AGN, quasars, nearby galaxies, Gamma-ray bursts). In particular the research will involve analysis of new and archival data from Chandra and XMM-Newton, as well as AstroE2 and Swift. The scientist will also be encouraged to maintain and develop his/her own research interests. Experience in X-ray data analysis and some knowledge of X-ray spectroscopy would be an advantage.

The position, to begin as soon as possible after the closing date, is for two years with the possibility of extension, depending on funding. Applicants should hold a Ph.D. in astronomy.

Applications received before March 31, 2005 will receive full consideration. Send application and vita, including brief description of past and proposed research to: Dr. Tahir Yaqoob, Department of Physics & Astronomy, Johns Hopkins University, Baltimore, MD 21218. Applicants should also arrange to have three letters of reference sent. The Johns Hopkins University encourages applications from women and minority candidates. AAE/EOE.

No. 21586

Lecturer

UNIVERSITY OF MARYLAND

Department of Astronomy

College Park, MD 20742

US

Tel: 301-405-3000

FAX: 301-314-9067

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

(Department home page)

URL2: <http://www.scholars.umd.edu>

(College Park Scholars)

Attention: Lecturer Search Committee

The Department of Astronomy anticipates an opening for a lecturer starting in Fall 2005. The primary duty would involve working in "Science, Discovery and the Universe" which is a honors type program in the College Park Scholars program. (The URL for the Scholars program is given in this ad.) Duties in this program would include teaching courses in the Scholars program as well as involvement with student research projects. Other duties would involve teaching in the regular department schedule. This teaching would be astronomy courses for non-science majors. Applications received by March 31, 2005 will be given full consideration.

No. 21587

Instrument Scientist

UNIVERSITY OF FLORIDA

211 Bryant Space Science Ctr.

Gainesville, FL 32611

USA

Tel: 352-392-2052, x260

FAX: 352-392-5089

Email Submission Address: eiken@astro.ufl.edu

Email Inquiries: eiken@astro.ufl.edu

Attention: Stephen Eikenberry, Professor of Astronomy

The Department of Astronomy at the University of Florida invites applications for an Instrument Scientist in its Infrared Astrophysics Group. This group is a recognized world leader in developing cutting edge infrared instrumentation for the world's largest ground-based observatories. The successful candidate will join the existing team in completing the FLAMINGOS-2 facility wide-field near-infrared imager and multi-object spectrograph for the Gemini Observatory, currently scheduled for commissioning in early 2006. After FLAMINGOS-2, the successful candidate will be expected to assist other developing projects, possibly including the proposed Gemini High-Resolution Near-InfraRed Spectrograph (currently in a competitive Conceptual Design phase).

The Instrument Scientist will work with the existing team on the design, fabrication, integration, testing, commissioning, and utilization of astronomical instruments, including the analysis and optimization of performance for astronomical observations. The Instrument Scientist will have 25% of her/his time available for scientific research, including access to instrument team guaranteed observing time. Competitive salary will be offered, dependent on qualifications and experience. We anticipate that this appointment will be made at the level of Assistant Scientist, which is a non-tenure-accruing faculty position.

The successful candidate must have a PhD in astronomy or a related field, and be familiar with infrared astronomical observing, data analysis, and instrument operations. Experience with instrument design, integration, testing, or commissioning are all strong pluses. He/she must travel and be physically able to work at 14,000 feet altitude observatories. Interested persons should submit a cover letter, CV, statement of research interests, and names of 3 references.

No. 21588

Fellowship in near-infrared integral-field spectroscopy studies

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 (RSAA) invites applications for a Postdoctoral Fellow to work on near-infrared integral-field spectroscopy studies of star formation, active galactic nuclei, super-massive black holes, or the dynamics of high redshift galaxies. The successful candidate will work with Dr Peter McGregor and Prof Ken Freeman or Prof Michael Dopita on projects using the new Near-infrared Integral Field Spectrograph (NIFS) with the ALTAIR adaptive optics system on the Gemini North 8-m diameter telescopes. NIFS is being developed at RSAA for the Gemini Observatory by a team led by Dr Peter McGregor. RSAA operates Siding Spring Observatory and RSAA staff have access to all of Australia's optical/IR and radio facilities including the Gemini telescopes, the Anglo-Australian

Telescope, the Australia Telescope Compact Array, and the ANU Supercomputing Facility. Both observational and computational / theoretical candidates are encouraged to apply. Candidates should possess a PhD in astronomy or a related field and have expertise in one or more of the following areas: observational optical/IR spectroscopy, data reduction, emission-line formation, galaxy dynamics. Salary range: \$AUD52863 - \$AUD56569 pa plus generous 17% superannuation plus relocation allowance. Start date by July 2005 preferred. Enquiries about position: Dr Peter McGregor, E: Peter.McGregor@anu.edu.au. Selection criteria must be obtained prior to application and can be obtained from <http://info.anu.edu.au/hr/jobs> (ANU job reference: RSAA2712) or from: academic.services.rsaa@anu.edu.au. Closing Date: 4 March 2005. Candidates should arrange for a minimum of 2 letters of recommendation to be sent directly to: academic.services.rsaa@anu.edu.au by the closing date.

No. 21589

POST DOCTORAL RESEARCH ASSOCIATE (Band 4/3)

UK ASTRONOMY TECHNOLOGY CENTRE

Royal Observatory

Blackford Hill

Edinburgh, Scotland EH9 3HJ

United Kingdom

Tel: +44 131 668 8284

URL1: <http://www.roe.ac.uk/atc>

Email Inquiries: atcrecruitment@roe.ac.uk

Attention: Recruitment ref. no. 03/05

UK ASTRONOMY TECHNOLOGY CENTRE

POST DOCTORAL RESEARCH ASSOCIATE

(Band 4/3)

Applications are invited for a 3-year postdoctoral research position at the UK Astronomy Technology Centre (UK ATC) which is the national centre for the design and production of world leading astronomical telescopes, instruments and systems, based in Edinburgh, to start on 1 April 2005.

The successful applicant will be expected to lead or support observational programmes that probe distant starburst galaxies and AGN in the infrared, submillimetre and radio wavebands, with a strong emphasis on the radio. Opportunities exist to become involved in upcoming surveys with UK ATC-built instrumentation such as WFCAM on UKIRT, to work with the SHADES survey group, leading the VLA, GMRT and MERLIN follow-up of submm galaxies, and to plan survey strategies for Apex, SCUBA-2 and ESA's Herschel mission.

The post holder will work primarily with Dr Rob Ivison (UK ATC) on all aspects of this programme as well as being encouraged to undertake independent research. This position comes with funds for observing and associated travel, conferences and equipment. Applicants must be willing to travel extensively. It also provides the opportunity to become involved with the instrumentation being designed and built at the UK ATC.

Although the vacancy is based in Edinburgh, work will be necessary at telescopes overseas: a high altitude medical is therefore a pre-requisite of the post.

Current UK ATC major projects include the delivery of systems to the European Southern Observatory VLT (in Chile), Gemini Telescopes Project (in Hawaii and Chile), the UK Infrared Telescope (Hawaii), the James Clerk Maxwell Telescope (Hawaii), the Herschel Space Observatory (HSO), Mid InfraRed Imager (MIRI) for the James Webb Space Telescope (JWST) and the design and build of VISTA - a 4m wide-field telescope in Chile. The UK ATC is co-sited with the University of Edinburgh's Institute for Astronomy.

Salary will be in the range of £21,015pa to £26,268pa for Band 4 or £26,925pa to £33,665pa for Band 3. Starting salary is dependent on qualifications and experience and appointment at Band 3 will only be made in very exceptional circumstances.

Where appropriate, assistance with relocation expenses may be available.

For more information and an application form please call our Recruitment line on 0131 668 8284, write to us at the UK ATC, Royal Observatory, Blackford Hill, Edinburgh EH9 3HJ, or email us at atcrecruitment@roe.ac.uk, quoting ref. no. 03/05. There is no formal deadline for the position, but applications received by 2 March 2005 will receive full consideration. Please note that applications from agencies will not be accepted. Closing date: 2 March 2005.

To find out more about the UK ATC visit us at <http://www.roe.ac.uk/atc> The UK ATC promotes equal opportunities through policy and practice.

The Royal Observatory, Edinburgh comprises the UK Astronomy Technology Centre of the Particle Physics and Astronomy Research Council, the Institute for Astronomy of the University of Edinburgh and the ROE Visitor Centre.

No. 21590

Scholarship in Astronomy for Master Students

LEIDEN OBSERVATORY

P.O. Box 9513

Netherlands

Tel: +31 71 5275837

FAX: +31 71 5275743

URL1: <http://www.strw.leidenuniv.nl/education/>

URL2: <http://www.fwn.leidenuniv.nl/gs/astronomy/qualapplmsc.htm>

Email Submission Address: masters@strw.leidenuniv.nl

Email Inquiries: masters@strw.leidenuniv.nl

Attention: Scholarship Committee

Leiden Observatory announces the availability of Oort Scholarships for excellent Master students from non-EU countries. The scholarships are meant for students who have a Bachelors degree in Astronomy or equivalent, and wish to obtain their Masters degree in Astronomy at Leiden University. The scholarship is for one year, with renewal for a second year conditional on successful completion of the first year. The scholarship amounts to 10.000 euros per year, which includes tuition. Leiden Observatory is the oldest university observatory

the world, and offers a wide range in advanced courses and research programmes. Astronomers have access to a large suite of world class facilities, including the ESO Very Large Telescope, Hubble Space Telescope, the Westerbork and future LOFAR radio telescope. Many of the students who have obtained their Masters degree in Leiden enroll into the PhD programme, during which they are paid a salary for 4 years.

Applications for the Oort scholarship should include the full application materials for the Masters programme (see <http://www.fwn.leidenuniv.nl/gs/astronomy/qualapplmsc.htm>), the reports of the research project(s) done by the applicant, a copy of the Bachelors diploma, a copy of the passport, and 3 letters of reference from academic supervisors. Application materials can be sent to the address listed above, or by email to masters@strw.leidenuniv.nl . Further information can be obtained at the same email address, and on <http://www.strw.leidenuniv.nl/education/> . The evaluation of applications starts on Feb 15 2005.

No. 21591**Postdoctoral Position in Optical/nIR Spectroscopy
ASTRONOMICAL INSTITUTE, UNIVERSITY OF AMSTERDAM****Kruislaan 403****The Netherlands****Tel: +31-20-5257474****FAX: +31-20-5257484****Email Submission Address: lexk@science.uva.nl****Email Inquiries: lexk@science.uva.nl*****Attention: Lex Kaper, dr.***

We seek a postdoctoral researcher to contribute to the development of data reduction software for X-shooter, the first second-generation instrument to be installed at the ESO Very Large Telescope at Paranal, Chile, in 2007. X-shooter is a very efficient echelle spectrograph covering the U to the K-band in one shot. An international consortium, including representatives from Denmark, France, Italy, the Netherlands and ESO, is involved in the construction of X-shooter. VLT/X-shooter will become the most powerful intermediate resolution spectrograph in the world. In addition to the software development, a significant fraction of time will be devoted to science projects and to the preparation of the X-shooter/GTO program.

The successful applicant will join the research group at the Astronomical Institute of the University of Amsterdam, which has a strong international reputation in high-energy astrophysics (X-ray binaries, pulsars, gamma-ray bursts), stellar and binary evolution, and star- and planet formation. Given the international collaboration on X-shooter, part of the work related to the development of data reduction software will be carried out at Paris Observatory. The emphasis will be on pipeline software for the near-infrared arm of the instrument.

The position is funded for a period of two years, with possibly an extension of a third year, and is immediately available. The net yearly salary is about Euro 31.500 (USD 42.500), depending on age, experience, and family situation. Interested candidates are invited to send their application, including a curriculum vitae and publication list, and the names of three references to the above address.

No. 21598**Research Associate/Assistant Astronomer
THE UNIVERSITY OF ARIZONA STEWARD OBSERVATORY**

Tel:

URL1: <http://mips.as.arizona.edu>*(MIPS Home Page)*URL2: <http://www.hr.arizona.edu>*(Human Resources Home Page)*URL3: <http://www.as.arizona.edu>*(Steward Observatory Home Page)*Email Submission Address: www.hr.arizona.eduEmail Inquiries: dwilson@as.arizona.edu***Attention:***

We invite applications for one or more positions to work on a guaranteed time program with the Multiband Imaging Photometer for Spitzer (MIPS). MIPS images in spectral bands at 24, 70, and 160 microns, using high performance infrared arrays. To learn more about this instrument, look at <http://mips.as.arizona.edu/>.

Responsibilities will include helping us reduce, analyze, and write papers on data obtained in the GTO program, and helping plan the program for the second half of the mission (estimated at 2.5 years duration). Prior infrared experience is not required for a candidate with strong qualifications. Although responsibilities for the Spitzer program must have priority, the positions include full access to other research capabilities at Steward Observatory, such as the 6.5-m MMT, the Magellan Telescopes, and the 10-m submm telescope.

The positions can be at the postdoctoral level or in the research ranks of Steward Observatory, at salaries from \$42,000 to \$53,000, depending on qualifications and experience. Review of applications will begin April 1, 2005, and will continue until filled. A position may be available as early as July 2005. To apply, please complete the on-line application at www.hr.arizona.edu (Job#32184); attach a Curriculum Vitae, a statement of experience and research interests, and the names of three references. For additional information, contact Ms. Debra Wilson at the above address, or by email to dwilson@as.arizona.edu. The University of Arizona is an EEO/AA Employer-M/W/D/V.

No. 21599**Postdoctoral Positions at the IAC
INSTITUTO DE ASTROFÍSICA DE CANARIAS**

C/ Vía Láctea s/c

La Laguna, Tenerife 38205

Spain

Tel: +34922605261

FAX: +34922605298

URL1: <http://www.iac.es/becasyempleos/inves/index.html>Email Submission Address: secinv@iac.esEmail Inquiries: secinv@iac.es***Attention: Tanja Karthaus, Secretary***

POSTDOCTORAL POSITIONS AT THE IAC Postdoctoral appointments in several research projects

The Instituto de Astrofísica de Canarias (IAC, Tenerife), invites applications for several postdoctoral positions to work within the following research projects: · “The Local Group galaxies as a stepping stone to the early Universe. II. The late-type galaxies: from the Milky Way to the dwarf irregulars”. P.I. Carme Gallart (carme@iac.es) · “Massive Stars in the Milky and Nearby Galaxies”. P.I. Artemio Herrero (ahd@iac.es) · “Sounding the interior of the Sun; instrumental and observational developments and new diagnostic tools”. P.I. Pere L. Pallé (plp@iac.es) · « A new era in time-domain Astrophysics”. P.I. Tariq Shahbaz (tsh@iac.es) · “Solar Magnetism and Spectropolarimetry in Astrophysics”. P.I. Javier Trujillo (jtb@iac.es) · “IAC’s participation in the AMS Project”. P.I.: Ramón García (rgl@iac.es)

The post is based at the IAC Headquarters in La Laguna, Tenerife. It is for up to December 2007. The gross annual salary is 28.334,12 euros. Starting date is as soon as possible since the selection procedures are finished

For further information on the position, application instructions, and deadlines, visit <http://www.iac.es/becasyempleos/inves/index.html> or contact the Secretary of the Research Division (secinv@iac.es). As of yet exact deadlines are unknown.

No. 21600

RECEIVER SUPPORTING ENGINEER

RESEARCH CORPORATION OF THE UNIVERSITY OF HAWAII

2530 DOLE ST.

SAKAMAKI HALL, D-100

HONOLULU, HI 96822

USA

Tel: 808-956-3100

FAX: 808-956-5022

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

Attention: NELSON SAKAMOTO, DIRECTOR, HUMAN RESOURCES

ASIAA RECEIVER SUPPORTING ENGINEER – ID# 25028. Institute of Astronomy and Astrophysics, Academia Sinica. Regular, Full-Time, RCUH Non-Civil Service position with the Institute of Astronomy and Astrophysics, Academia Sinica (ASIAA), located in Hilo, Hawaii. Continuation of employment is dependent upon program/operational needs, satisfactory work performance, and availability of funds. Monthly Salary: Salary commensurate with qualifications. Duties: Responsible for receiver system integration and operational support, and subsequent maintenance in the Submillimeter Array (SMA), and responsible for the testing and trouble shooting of ASIAA receiver instruments. Participate with the technical and astronomical staff in testing the final electronics and detector systems within the antenna systems, and verify that they are brought up to the final performance requirements on site. The incumbent will have up to 30% of time reserved for personal research related to submillimeter astronomy and instrumentation. Minimum Qualifications: Education: Bachelor's Degree or higher from an accredited four (4) year college or university in Electrical Engineering, or a related, technical field. Each higher level degree, i.e. Masters Degree or Ph.D., may substitute for 1 to 2 years

(respectively) of experience, if the degrees are related to technical engineering, experimental science, or instrumentation astronomy.) Experience: Two to four (2-4) years of experimental instrumentation in microwave, mm-wave, or sub-millimeter wave devices and system. Experience with microwave testing equipments is required. One (1) year of observing experience with mm-wave and submillimeter-wave radio telescope is required. Abil/Know/Skills: A strong knowledge of microwave receivers, heterodyne detection, radio telescopes and radio interferometry arrays. Good knowledge of the theories, principles, and practices of electronics engineering. Knowledge of standards used in electronics construction. Computing skill with Linux and Unix operating system. Ability to communicate with scientists and engineers on the design and use of detector systems is required. Ability to diagnose critically and test electronics circuits. Possession of a valid driver's license and the ability to drive a 4-wheel-drive vehicle with manual transmission up the Mauna Kea summit. Physical/Medical Requirements: Must be able to work at 14,000 feet, and pass a high-altitude medical examination. Desirable Qualifications: A strong knowledge in observational astronomy and astrophysical is preferred. Observing experience with radio interferometers is desirable. Experience in the design and construction of quasi-optics system, microwave and mm-wave detector electronics, servo loop electronics, or experience in deployment and field testing of sensitive electronic instrumentation are desirable. In addition to the typical educational and experience requirements, a demonstrated capability to adequately perform the essential functions and responsibilities of the position and exhibit the skills and competencies should be considered. Familiarity with C programming is desired. Inquiries: Ming-Tang Chen (808)961-2931 (Hawaii). Application Requirements: The preferred method of applying for a job is through our on-line application process. Please go to www.rcuh.com, click on "Employment" and navigate to "Job Announcements/Apply for a Job." However, if you do not have access to the Internet, you may apply by submitting resume; cover letter including Recruitment ID#, referral source, narrative of your qualifications for position and salary history; names, phone numbers and addresses of three supervisory references and copy of degree (s)/transcripts/certificate(s) to qualify for position by fax (808) 956-5022 or mail to Director of Human Resources, Research Corporation of the University of Hawaii, 2530 Dole Street, Sakamaki Hall D-100, Honolulu, HI 96822 before the closing date. Closing Date: February 28, 2005. EEO/AA Employer

No. 21601**Postdoctoral position in Computational Astrophysics****SAINT MARY'S UNIVERSITY****Tel: (902)420-5105****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). Two openings are expected, subject to availability of funding. Any appointment would initially be for two years with possible renewals for a total of up to five. 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. 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 (CRCs). There are also two postdoctoral and three 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. Arrangements can be made for access to other high performance computers 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 31 March 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. 21602

Postdoc in Astrophysical MHD

LOS ALAMOS NATIONAL LAB

X-1, MS B227

Los Alamos, NM 87545

USA

Tel: (505) 665-3131

FAX: (505) 664-0007

Email Submission Address: hli@lanl.gov

Email Inquiries: hli@lanl.gov

Attention: Hui Li, Dr

The Los Alamos National Laboratory invites applications for a research postdoctoral position, the starting date of which could be immediate and no later than July 1, 2005. The position is expected to be two years initially, with a possible extension to a third year. Eligible applicants should have a PhD in astronomy or physics and must be within 5 years of their PhD at the time of appointment. Candidates with experience in computing as well as magnetohydrodynamic modeling are preferred. The successful applicant will work with Dr. Hui Li in fields directly related to astrophysical magnetohydrodynamics. These include, but not limited to, astrophysical jets, production and evolution of cosmological magnetic fields in the inter-galactic medium. We have excellent local computing facilities as well as access to large supercomputing facilities.

Interested candidates should send a curriculum vita, bibliography, a one-page statement of research interests and three letters of recommendation by March 1, 2005 to Dr. Hui Li, X-1, MS B227, Los Alamos National Lab, Los Alamos, NM 87545. Email submission is encouraged at hli@lanl.gov Please refer to <http://www.lanl.gov/science/postdocs> for more details on

benefits.

No. 21603

**Postdoctoral Fellowships and Studentships: JETSET Research Training Network
JETSET RTN - DUBLIN INSTITUTE FOR ADVANCED STUDIES**

5 Merrion Square

Ireland

Tel: +353-1-6621333

FAX: +353-1-6621477

URL1: <http://www.jetsets.org>

(JETSET RTN website)

Email Submission Address: eflood@cp.dias.ie

Email Inquiries: eflood@cp.dias.ie

Attention: Eileen Flood

Applications are invited for 11 PhD Studentships and 6 Postdoctoral Fellowships in the study of plasma jets concentrating on understanding outflows from young stars. As part of its current Marie Curie Research Training Network (RTN) programme, the European Commission has provided four years of funding for a new network called JETSET. It will bring together researchers working on observations, theoretical and computational modelling, laboratory experiments, and Grid technology and it is centred on plasma jet studies, with a focus on outflows from young stars. The network links the following eleven institutions:

1. Dublin Institute for Advanced Studies, Ireland 2. Università degli Studi di Torino, Italy 3. Universite Joseph Fourier, Grenoble, France 4. Institute of Accelerating Systems and Applications, Athens, Greece 5. Observatoire de Paris, France 6. Osservatorio Astronomico di Roma, Italy 7. Osservatorio Astrofisico di Arcetri, Florence, Italy 8. Thüringer Landessternwarte, Tautenburg, Germany 9. Centro de Astrofisica da Universidade do Porto, Portugal 10. Landessternwarte Heidelberg, Germany 11. Imperial College of Science, Technology and Medicine, London, UK

Posts (PF=Postdoctoral Fellowships, and Studentships) will be available in the following areas:

1: Models of MHD Jets in Young Stars: 2 PFs in Athens and Grenoble, 2 Studentships in Porto and Turin 2: The Observed Structure and Propagation of Stellar Jets: 1 PF in Florence and 3 Studentships in Turin, Porto and Grenoble 3: The Molecular Counterparts and Effects of Jets on their Environment: 1 PF in Tautenburg and 2 Studentships in Rome 4: The Structure and Propagation of Laboratory Jets: 2 Studentships in London 5: Large Numerical Simulations of Jets using Grid Technology: 1 PF in Dublin and 2 Studentships in Heidelberg 6: Trans-Disciplinary Approach: 1 PF in Dublin

Individual deadlines for applications are posted on the JETSET website where further details about the positions, application procedures and restrictions can be found. All candidates will be required to submit a curriculum vitae, a short research proposal (not for studentships) and three letters of reference. JETSET is committed to equal opportunity/affirmative action. Women and members of minorities are encouraged to apply.

No. 21604

Postdoctoral Opportunity in Numerical Astrophysics
LAWRENCE LIVERMORE NATIONAL LABORATORY
Tel:
URL1: <http://www.llnl.gov/llnl/education/postdocs.jsp>

Attention: Please visit web site to apply, <http://jobs.llnl.gov>

Postdoctoral Opportunity in Numerical Astrophysics

Lawrence Livermore National Laboratory

Livermore, CA

The Physics and Advanced Technologies Directorate/V Division at Lawrence Livermore National Laboratory seeks a qualified postdoctoral candidate to develop computer models of white dwarf, neutron star, and black hole binaries. The successful 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 hydrodynamic models of the accretion flows and winds of such binaries, with the aim of producing detailed theoretical spectra that can be tested against observational data, especially those of Chandra, XMM-Newton, and Astro-E2. A recent Ph.D. in Physics or Astrophysics, with expertise in computational astrophysical fluid dynamics and experience in one or more of the following areas, is desired: X-ray astronomy, X-ray spectroscopy, radiative transfer, plasma emission models.

Initial appointment will be for one year with the possibility of renewal for up to a maximum of three years. For more information on the Post Doctoral Program at Lawrence Livermore National Laboratory, please visit our web site at:
<http://www.llnl.gov/llnl/education/postdocs.jsp> .

LLNL offers a challenging environment and a competitive salary/benefits package. To view and apply for this job, go to <http://jobs.llnl.gov> , Advanced Search feature and enter the AIAH215PT source code. 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. 21605
Postdoctoral Research in Clusters of Galaxies
MICHIGAN STATE UNIVERSITY
Physics & Astronomy Dept.
East Lansing, MI 48824-2320
USA
Tel: 517 355 9200 x2418
FAX: 517 353 4500
Email Submission Address: donahue@pa.msu.edu
Email Inquiries: donahue@pa.msu.edu

Attention: Megan Donahue, Associate Professor

Applications are invited for a postdoctoral research position in X-ray cluster astronomy at Michigan State University to work in collaboration with Dr. Megan Donahue and Dr. Mark Voit in the Department of Physics and Astronomy. Candidates must hold a Ph.D. degree in Physics or Astrophysics and should have expertise and interest in X-ray astronomy and clusters of galaxies. The successful candidate will likely work with data and simulations, assist in guiding students, and will develop research proposals. The position is initially for one year, with extensions of up to three years. The proposed start date of Sept. 2005 is negotiable.

Applicants should send a curriculum vitae, a publication list, and a cover letter highlighting relevant interests and experience, and arrange to have three letters of recommendation sent to the above address. Applications will be accepted until the position is filled. Complete applications should be received by March 15, 2004 to ensure full consideration. Women and minorities are encouraged to apply. MSU is an Affirmative Action/Equal Opportunity Institution

No. 21606

**Postdoctoral Scholar, Detector Development Lab
UNIVERSITY OF CALIFORNIA, SANTA CRUZ
UCO/Lick Observatory
1156 High Street
Santa Cruz, CA 95064
USA**

Tel: 831.459.2991

FAX: 831.459.5244

URL1: <http://www.ucolick.org>

Email Submission Address: director@ucolick.org

Attention: Joseph Miller, Director

UNIVERSITY OF CALIFORNIA, SANTA CRUZ UCO/LICK OBSERVATORY
POSTDOCTORAL SCHOLAR

The University of California Observatories/Lick Observatory invites applications for a postgraduate researcher position in the Observatory's CCD detector development group. Contingent on the availability of funding, the appointment will be for two years beginning January 1, 2005 (start date negotiable). The appointment may be extended to three years if funds allow. Applicants should have demonstrated experience in one or more of these areas: astronomical instrumentation, CCD detector development, software development, and optical design. The appointee will contribute to all aspects of the detector lab's CCD testing programs. The CCD laboratory is currently working with Lawrence Berkeley National Laboratory (high resistivity CCDs), Lincoln National Laboratory (advanced adaptive optics CCDs), and other CCD manufacturers to develop some of the world's most advanced CCD detectors. The laboratory also supports the CCD instruments at UCO/Lick and Keck Observatories. We anticipate working on CCD systems for the 30-meter California Extremely Large Telescope and other major projects. The laboratory also supports the CCD operations at Lick Observatory.

RANK: Postdoctoral Scholar

SALARY: \$43,908 - \$48,168 annually

MINIMUM QUALIFICATIONS: PhD or equivalent in Observational Astronomy or Astrophysics or a closely related field, experience developing astronomical instrumentation hardware and/or software, including work with CCD detectors, digital and analog electronics used in low-noise signal processing systems, C programming, and the Unix operating system. Must be able to work independently yet collegially in a team environment. The ability to produce high quality documentation is important. Ability to travel to high altitude observatories is required.

TERM OF APPOINTMENT: Two years, with possible extension to three years, contingent on performance and availability of funding.

POSITION START DATE: January 1, 2005 (negotiable).

APPLICATION MATERIALS: Applicants should send a vita, publication list, brief summary of relevant research experience, brief statement of research interests, and the names of three referees who have been asked by the applicant to submit letters of recommendation (all letters will be treated as confidential, please direct your references to UCSC's confidentiality statement at <http://www2.ucsc.edu/ahr/policies/confstm.htm>) to:

SUBMISSION ADDRESS: Postgraduate Researcher Recruitment c/o UCO/Lick, Office of the Director 1156 High Street University of California Santa Cruz, CA 95064 Please refer to provision # T04-44 in your reply.

CLOSING DATE: This position is open until filled. Applications will first be considered on March 15, 2004.

UCSC IS AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER
WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY

Inquiries regarding the University's equal employment opportunity policies may be directed to: Equal Employment Opportunity/Affirmative Action Office at, University of California, Santa Cruz, CA 95064; (831) 459-2686. Under Federal law, the University of California may employ only individuals who are legally able to work in the United States as established by providing documents as specified in the Immigration Reform and Control Act of 1986.

If you need assistance due to a disability please contact the Academic Human Resources Office at 350 McHenry Library (831) 459-4300. This position description is available in alternate formats, which may be requested from Academic Human Resources at (831) 459-4300.

VISIT THE AHR WEB SITE AT <http://www2.ucsc.edu/ahr/employment/>

No. 21607
Postdoctoral Research Associate with VERITAS
PURDUE UNIVERSITY
Department of Physics
525 Northwestern Ave.

West Lafayette, IN 47907-2036
USA
Tel: 765.494.3001
FAX: 765.496.2298
Email Submission Address: finley@purdue.edu
Email Inquiries: finley@purdue.edu

Attention: John P. Finley, Professor

Purdue University - Postdoctoral Research Associate

Applications are invited for a postdoctoral position to work with the VERITAS high energy astrophysics group in the Department of Physics at Purdue University. VERITAS is an array of ground based gamma-ray telescopes currently under construction in the Horseshoe Canyon on Kitt Peak in southern Arizona. The array will be completed in fall 2006 and the successful applicant is to be stationed in Arizona and will be expected to participate in the construction, commissioning and operation of the array. The Purdue group has significant responsibilities for the optics, the focal plane detectors, and the acquisition and analysis software. Scientifically the group has been pursuing the physics of compact objects, both Galactic and extra-galactic, and has carried out multiwavelength campaigns utilizing data from the radio through the X-ray energy domains in coordination with the gamma-ray. The successful applicant will be strongly encouraged to pursue his/her science interests.

The postdoctoral fellowship is for two years, with the possibility of renewal for an additional year contingent on performance and continued funding. Candidates must hold a Ph.D. or equivalent in physics or astronomy. The starting date is negotiable. To apply, please send a vita, bibliography, statement of research, and have three letters of recommendation sent to: Professor John P. Finley, Department of Physics, Purdue University, 525 Northwestern Avenue, West Lafayette, IN 47907-2036 or submit electronically to finley@purdue.edu. The position will remain open until filled, although completed applications will be evaluated as soon as they are received. Purdue University is an Equal Opportunity/Equal Access/Affirmative Action employer and is committed to building a diverse faculty of excellence. Women and minorities are especially encouraged to apply.

No. 21611

Two Postdoctoral Research Fellows in Cool Stars and Extrasolar Planets

UNIVERSITY OF ST ANDREWS

College Gate

North Street

St Andrews, Fife KY16 9AJ

Scotland

Tel: +44 1334 462571

FAX: +44 1334 462570

URL1: <http://star-www.st-and.ac.uk/astronomy/>

(St Andrews Astronomy)

URL2: <http://www.st-andrews.ac.uk/academic/physics/>

(School of Physics and Astronomy)

URL3: <http://www.st-andrews.ac.uk/index.shtml>

(University of St Andrews)

Email Inquiries: Jobline@st-andrews.ac.uk

Attention: Human Resources

University of St Andrews School of Physics and Astronomy Research Fellows (2)

Salary - £21,640 - £24,820 pa

We have two posts available, initially for 2 years, funded by a PPARC rolling grant for research in one or more of the following areas: (1) Doppler tomography of stellar surface-brightness distributions and circumstellar magnetic structures; (2) observational searches for and studies of extra-solar planets. The posts may be extended for a further two years depending on performance and continued funding.

You must have a PhD, familiarity with current issues in the relevant research area, and ability to pursue independent research as evidenced by a record of publications.

Please quote ref: JJ117/05 Closing Date: 1 March 2005

Application forms and further particulars are available from Human Resources, University of St Andrews, College Gate, North Street, St Andrews, Fife KY16 9AJ, (tel: 01334 462571, by fax 01334 462570 or by e-mail Jobline@st-andrews.ac.uk). The advertisement and further particulars can be viewed at <http://www.st-andrews.ac.uk/hr/recruitment/vacancies> .

The University is committed to equality of opportunity.

No. 21638

Lectureship in Astronomy and Astrophysics

THE UNIVERSITY OF WARWICK

Tel:

URL1: <http://www.jobs.ac.uk/warwick>.

Attention: T.R.Marsh

Physics Lectureship in Astronomy and Astrophysics £27,989 to £35,883 pa Ref: 31478-124 Applications are invited for a Lectureship within the Astronomy & Astrophysics group of the Department of Physics at the University of Warwick. The position is part of the establishment of the Astronomy & Astrophysics group at Warwick under the leadership of Prof. Tom Marsh. The group's research interests cover accretion, compact objects, interacting binary stars, binary star evolution, high-energy and time-domain astrophysics. Applicants should hold a PhD (or equivalent degree) and have at least three years experience at postdoctoral level and a record of publication in international journals. Teaching experience and a record of obtaining research contracts would be desirable. Informal enquiries may be made to T.R.Marsh@warwick.ac.uk Application packs are available from Personnel Services on 024 7652 3685 (24 hour answer phone), by email recruit@warwick.ac.uk ,our website below or www.jobs.ac.uk/warwick . An application form **MUST** be completed if you wish to be considered for this post. Closing date: 1 March 2005 The University Values Diversity www.warwick.ac.uk/jobs

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