

# THE PORTUGUESE NEWSLETTER OF ASTRONOMY

## BOLETIM PORTUGUÊS DE ASTRONOMIA

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Editors/*Editores*:

Rui Azevedo & Paula Stella Teixeira

(newsletter@news.universebox.com)

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## 1 FROM THE EDITORS

### *Dos Editores*

Dear subscribers,

The Portuguese Newsletter for Astronomy has just turned one year old! We congratulate all those who have participated in this project by submitting their abstracts and general announcements relevant to the Portuguese astronomical community. We are looking forward to another year of interesting submissions and editions of the PNA!

We hereby invite all researchers in astronomy (astrophysics, cosmology, astroparticles, instrumentation, etc.) that are either affiliated with a Portuguese institution or are Portuguese nationals working abroad to submit abstracts of their work and of other information deemed relevant to the PNA. Specifically, you may submit to the PNA if you have:

1. an article recently accepted by a refereed journal in which you are (co)author;
2. a poster or a talk accepted in a conference with a scientific committee in which you are (co)author;
3. a recent PhD dissertation;
4. a job or scholarship posting;
5. information about a meeting or a conference;
6. calls for proposals (observational, funding, etc);
7. other relevant information.

The submission may be done via the PNA website <http://news.universebox.com>. This website hosts all the PNA editions. You may also subscribe to the mailing list or to the feeds to be notified of a new edition.

Best wishes,  
The PNA editors  
Rui Azevedo,  
Paula Stella Teixeira

## 2 ABSTRACTS OF RECENTLY ACCEPTED PAPERS

### *Resumos de artigos aceites recentemente*

#### **Spatial variability of carbon monoxide in Venus' mesosphere from Venus Express/Visible and Infrared Thermal Imaging Spectrometer measurements**

Irwin, P. G. J.<sup>1</sup>; de Kok, R.<sup>1</sup>; Negrão, A.<sup>2</sup>; Tsang, C. C. C.<sup>1</sup>; Wilson, C. F.<sup>1</sup>; Drossart, P.<sup>3</sup>; Piccioni, G.<sup>2</sup>; Grassi, D.<sup>2</sup>; Taylor, F. W.<sup>1</sup>;

<sup>1</sup> Atmospheric, Oceanic, and Planetary Physics, Clarendon Laboratory, University of Oxford, Oxford, UK;

<sup>2</sup> INAF-IFSI, Rome, Italy;

<sup>3</sup> LESIA, Observatoire de Paris, Meudon, France;

Observations of Venus' mesosphere by the Visible and Infrared Thermal Imaging Spectrometer (VIRTIS)-M instrument of Venus Express have been used to investigate the spatial distribution of CO above Venus' nightside cloud tops by fitting the CO absorption in the (1-0) CO band around 4.7  $\mu\text{m}$ . We find little spatial variation in the abundance of CO at midlatitudes, with a retrieved abundance of approximately  $40 \pm 10$  ppm just above the cloud tops between 65 and 70 km altitude. Unfortunately, we find it very difficult to constrain the abundance of CO in the cold polar collar, centered at about 70°S, as the retrieved temperature structure in the CO line-forming region masks the absorption lines. However, there is a possibility that CO increases toward the poles, as we detect a significant signature of high

levels of CO over Venus' south polar dipole feature in all the observations analyzed so far. To constrain the abundance of CO more closely will require the analysis of higher-resolution VIRTIS-H observations. In addition, limb observations would greatly help to resolve any possible temperature/cloud ambiguities and allow us to assess vertical variations in the abundance of CO.

Accepted by: Journal of Geophysical Research, Volume 113, CiteID E00B01

## On the equilibrium rotation of Earth-like extra-solar planets

Correia, A. C. M.<sup>1</sup>; Levrard, B.<sup>2</sup>; Laskar, J.<sup>3</sup>;

<sup>1</sup> Departamento de Física da Universidade de Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal;

<sup>2</sup> Astronomie et Systèmes Dynamiques, IMCCE-CNRS UMR 8028, 77 Avenue Denfert-Rochereau, 75014 Paris, France;

<sup>3</sup> Université de Lyon 1, CRAL, Ecole Normale Supérieure de Lyon, 46 allée d'Italie, 69364 Lyon Cedex 07, France;

The equilibrium rotation of tidally evolved “Earth-like” extra-solar planets is often assumed to be synchronous with their orbital mean motion. The same assumption persisted for Mercury and Venus until radar observations revealed their true spin rates. As many of these planets follow eccentric orbits and are believed to host dense atmospheres, we expect the equilibrium rotation to differ from the synchronous motion. Here we provide a general description of the allowed final equilibrium rotation states of these planets, and apply this to already discovered cases in which the mass is lower than twelve Earth-masses. At low obliquity and moderate eccentricity, it is shown that there are at most four distinct equilibrium possibilities, one of which can be retrograde. Because most presently known “Earth-like” planets present eccentric orbits, their equilibrium rotation is unlikely to be synchronous.

Accepted by: Astronomy and Astrophysics

<http://arxiv.org/abs/0808.1071>

## Color-Inclination Relation of the Classical Kuiper Belt Objects

Peixinho, N.<sup>1,2,3</sup>; Lacerda, P.<sup>1</sup>; Jewitt, D.<sup>1</sup>;

<sup>1</sup> Institute for Astronomy, University of Hawaii, USA;

<sup>2</sup> Centre for Computational Physics, University of Coimbra, Portugal;

<sup>3</sup> Astronomical Observatory of the University of Coimbra, Portugal;

We re-examine the correlation between the colors and the inclinations of the Classical Kuiper Belt Objects (CKBOs) with an enlarged sample of optical measurements. The correlation is strong ( $\rho = -0.7$ ) and highly significant ( $> 8\sigma$ ) in the range  $0^\circ - 34^\circ$ . Nonetheless, the optical colors are independent of inclination below  $\approx 12^\circ$ , showing no evidence for a break at the reported boundary between the so-called dynamically “hot” and “cold” populations near  $\approx 5^\circ$ . The commonly accepted parity between the dynamically cold CKBOs and the red CKBOs is observationally unsubstantiated, since the group of red CKBOs extends to higher inclinations. Our data suggest, however, the existence of a different color break. We find that the functional form of the color-inclination relation is most satisfactorily described by a non-linear and stepwise behavior with a color break at  $\approx 12^\circ$ . Objects with inclinations  $\geq 12^\circ$  show bluish colors which are either weakly correlated with inclination or are simply homogeneously blue, whereas objects with inclinations  $< 12^\circ$  are homogeneously red.

Accepted by: The Astronomical Journal

<http://arxiv.org/abs/0808.3025>

### 3 ABSTRACTS OF RECENT CONFERENCE CONTRIBUTIONS

#### *Resumos de trabalhos apresentados em conferências*

#### VSI: the VLTI spectro-imager

Malbet, F.<sup>1</sup> Buscher, D.<sup>2</sup> Weigelt, G.<sup>3</sup> Garcia, P.<sup>4</sup> Gai, M.<sup>5</sup> Lorenzetti, D.<sup>6</sup> Surdej, J.<sup>7</sup> Hron, J.<sup>8</sup> Neuhüser, R.<sup>9</sup> Kern, P.<sup>1</sup> Jocou, L.<sup>1</sup> Berger, J.-P.<sup>1</sup> Absil, O.<sup>1</sup> Beckmann, U.<sup>3</sup> Corcione, L.<sup>5</sup> Duvert, G.<sup>1,10</sup> Filho, M.<sup>4</sup> Labeye, P.<sup>11</sup> Le Coarer, E.<sup>1</sup> Li Causi, G.<sup>6</sup> Lima, J.<sup>12</sup> Perraut, K.<sup>1</sup> Tatulli, E.<sup>1,10,13</sup> Thiébaud, E.<sup>14</sup> Young, J.<sup>2</sup> Zins, G.<sup>1</sup> Amorim, A.<sup>12</sup> Aringer, B.<sup>8</sup> Beckert, T.<sup>3</sup> Benisty, M.<sup>1</sup> Bonfils, X.<sup>12</sup> Cabral, A.<sup>15</sup> Chelli, A.<sup>1,10</sup> Chesneau, O.<sup>16</sup> Chiavassa, A.<sup>17</sup> Corradi, R.<sup>18</sup> de Becker, M.<sup>7</sup> Delboulbé, A.<sup>1</sup> Duchêne, G.<sup>1</sup> Forveille, T.<sup>1</sup> Haniff, C.<sup>2</sup> Herwats, E.<sup>1,7</sup> Hofmann, K.-H.<sup>3</sup> Le Bouquin, J.-B.<sup>19</sup> Ligi, S.<sup>5</sup> Loreggia, D.<sup>6</sup> Marconi, A.<sup>13</sup> Moitinho, A.<sup>12</sup> Nisini, B.<sup>6</sup> Petrucci, P.-O.<sup>1</sup> Rebordao, J.<sup>15</sup> Speziali, R.<sup>6</sup> Testi, L.<sup>13,20</sup> Vitali, F.<sup>6</sup>

<sup>1</sup> Université J. Fourier, CNRS, Laboratoire d'Astrophysique de Grenoble, UMR 5571, BP 53, F-38041 Grenoble cedex 9, France;

<sup>2</sup> Cavendish Laboratory of University of Cambridge, UK;

<sup>3</sup> Max-Planck Institute for Radioastronomy, Bonn, Germany;

<sup>4</sup> Faculdade de Engenharia & Centro de Astrofísica, Universidade do Porto, Portugal ;

<sup>5</sup> INAF - Osservatorio Astronomico di Torino, Italy;

<sup>6</sup> INAF - Osservatorio Astronomico di Roma, Italy;

<sup>7</sup> Institute of Astrophysics and Geophysics, Liège, Belgium;

<sup>8</sup> Institute of Astrophysics of the university of Wien, Austria;

<sup>9</sup> Astrophysical Institute and University Observatory, Jena, Germany;

<sup>10</sup> Jean-Marie Mariotti Center, CNRS, France;

<sup>11</sup> CEA-LETI, Minatec, Grenoble, France;

<sup>12</sup> SIM/IDL Faculdade de Ciências da Universidade de Lisboa, Portugal;

<sup>13</sup> INAF/Osservatorio di Astrofisica di Arcetri, Italy;

<sup>14</sup> Centre de Recherche en Astrophysique de Lyon, France;

<sup>15</sup> Instituto Nacional de Engenharia, Tecnologia e Inovação, Lisboa, Portugal;

<sup>16</sup> Observatoire de la Côte d'Azur, Laboratoire Gemini, Nice, France;

<sup>17</sup> Groupe de Recherches en Astronomie et Astrophysique du Languedoc, Montpellier, France;

<sup>18</sup> Instituto de Astrofísica de Canarias, Spain;

<sup>19</sup> European Southern Observatory, Santiago, Chile;

<sup>20</sup> European Southern Observatory Headquarters, Garching, Germany;

The VLTI Spectro Imager (VSI) was proposed as a second-generation instrument of the Very Large Telescope Interferometer providing the ESO community with spectrally-resolved, near-infrared images at angular resolutions down to 1.1 milliarcsecond and spectral resolutions up to  $R=12000$ . Targets as faint as  $K=13$  will be imaged without requiring a brighter nearby reference object. The unique combination of high-dynamic-range imaging at high angular resolution and high spectral resolution enables a scientific program which serves a broad user community and at the same time provides the opportunity for breakthroughs in many areas of astrophysics including: probing the initial conditions for planet formation in the AU-scale environments of young stars; imaging convective cells and other phenomena on the surfaces of stars; mapping the chemical and physical environments of evolved stars, stellar remnants, and stellar winds; and disentangling the central regions of active galactic nuclei and supermassive black holes. VSI will provide these new capabilities using technologies which have been extensively tested in the past and VSI requires little in terms of new infrastructure on the VLTI. At the same time, VSI will be able to make maximum use of new infrastructure as it becomes available; for example, by combining 4, 6 and eventually 8 telescopes, enabling rapid imaging through the measurement of up to 28 visibilities in every wavelength channel within a few minutes. The current studies are focused on a 4-telescope version with an upgrade to a 6-telescope one. The instrument contains its own fringe tracker and tip-tilt control in order to reduce the constraints on the VLTI infrastructure and maximize the scientific return.

Proc. SPIE conference 7013 "Optical and Infrared Interferometry", Schoeller, Danchi, and Delplancke, F. (eds.). See also <http://vsi.obs.ujf-grenoble.fr>

<http://arxiv.org/abs/0807.1062>

## 4 NEW JOB AND SCHOLARSHIP OFFERS

### *Anúncios recentes de empregos e bolsas*

#### **ESO Vacancy Notices**

To whom it may concern,

The following vacancies:

- Electronics Technician
- Front End System Engineer
- Data Product Scientist
- Hubble Outreach Coordinator
- Administrative Assistant
- Electronics Group Manager
- Requirements Analyst

are to be filled with the European Organisation for Astronomical Research in the Southern Hemisphere (ESO).

We would very much appreciate if you could bring these vacancy notices to the attention of possible candidates and/or give them wide publicity through your internal publication procedure.

ESO's vacancies can be found at <https://jobs.eso.org/>.

Thank you in advance for your assistance

Isabell Heckel  
Human Resources  
European Southern Observatory  
Karl-Schwarzschild-Strasse 2  
D-85748 Garching bei Muenchen

Email: [iheckel@eso.org](mailto:iheckel@eso.org)

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#### **CfA Online Fellowship Application Available**

The following 2009 Fellowship Programs are now accepting applications online:

##### **CLAY POSTDOCTORAL FELLOWSHIP PROGRAM**

<http://www.cfa.harvard.edu/clay/>

Deadline: October 30, 2008

##### **CFA POSTDOCTORAL FELLOWSHIP PROGRAM**

<http://www.cfa.harvard.edu/postdoc/>

Deadline: October 30, 2008

##### **MENZEL POSTDOCTORAL FELLOW POSITION**

<http://www.cfa.harvard.edu/menzel/>

Deadline: October 30, 2008

##### **SMA POSTDOCTORAL FELLOWSHIP PROGRAM**

<http://www.cfa.harvard.edu/opportunities/fellowships/sma/>

Deadline: December 1, 2008

Information and instructions can be found at the links above.

Best regards,

Christine

Christine Crowley, Coordinator  
Fellowship Program  
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## PhD position at Leiden observatory

PhD position at Leiden Observatory on galaxy spectra

A 4-year PhD position is available at Leiden Observatory in the field of galaxy evolution to work with Dr. Jarle Brinchmann, with start negotiable but ideally during 2008. The student will be working on resolved spectroscopy of galaxies at high and low redshift. The main aim of the work is to carry out a comparative study of star-forming galaxies at different redshifts. It has become clear that typical high- and low-redshift galaxies are systematically different in some properties and it has recently been argued that this is in part due to differences in the physical properties of their star-forming regions. The student will be working on furthering these studies and to expand them to also look at differences in the dynamical structure of high- and low-redshift galaxies in a systematic way. This work will in part be using recent integral field spectroscopy data acquired using the VLT and will require the development of techniques and methodologies to accurately compare low- and high-redshift galaxies.

For this project we seek excellent and enthusiastic candidates, who are highly interested in observational astronomy and computational techniques, a good understanding of statistics is beneficial. The astronomy department at Leiden is internationally oriented and hosts about 40 graduate students of several nationalities. Further information about the department can be found at [www.strw.leidenuniv.nl](http://www.strw.leidenuniv.nl).

Applicants should contact Dr. Brinchmann at the address below for further information. Applicants should have, or soon obtain, a masters degree in astronomy or in physics with a strong astronomy component. Complete applications, including curriculum vitae (with a list of courses and grades), two letters of reference, and a letter explaining your interest in the project, should be sent by the 1st of October 2008 to:

Dr. Jarle Brinchmann  
Sterrewacht Leiden, PO Box 9512, 2300 RA Leiden, The Netherlands  
<http://www.strw.leidenuniv.nl/~jarle>  
email: jarle@strw.leidenuniv.nl  
tel: +31 71 527 8470  
fax: +31 71 527 5819

## ESO FELLOWSHIPS

The closing date for applications for ESO Fellowships, to be taken up in 2009, is 15 October 2008. Full details can be found at: <https://jobs.eso.org/ESOC370/documents/DOC0000071.PDF> Applications should be made online through the ESO recruitment portal <https://jobs.eso.org/ESOC370/default.asp?PageNo=DEFAULT>

## Lugar Doutor Ciência 2008 no CFTC da U. Lisboa

Caros Colegas

Quero anunciar-vos que aqui no Centro de Física Teórica e Computacional da U. Lisboa abriu um concurso para um lugar de Doutor Ciência 2008 em "Particle Physics e Cosmology". Os detalhes do lugar em oferta encontram-se em

<http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId=9794>

Animo aqueles que se enquadrem na área deste concurso a concorrerem.

Cumprimentos

José Pedro Mimoso

## GAIA postdoc in Geneva

Time-series analysis of variable astrophysical sources

The Geneva Observatory invites applications for a position to work on preparations for the Gaia data processing. Gaia is an ESA mission due for launch in late 2011 that will undertake an astrometric, photometric and spectroscopic survey of the Galaxy. At the Geneva Observatory a group of 8 scientists and software developers leads the European-wide collaboration responsible for the variability processing and analysis of the Gaia data.

The successful candidate will develop algorithms for classifying and analysing photometric and radial velocity times series of astronomical sources. The work involves: statistics; basic research into machine learning algorithms; software development, testing and documentation; application of classification algorithms to simulated and real data; analysis of results; publication of methods and scientific results.

The applicant should preferably have a PhD in astrophysics. Applicants must be able to program (Java knowledge is an advantage) and have experience with data processing, data mining or machine learning methods. The position is available from January 1 2009 through to 31 December 2011. The position is possibly extendable subject to continuation of funding. The gross salary is estimated to be typically between 90'000-100'000 Swiss Franc (CHF) depending on past experiences.

To apply, please send before the 15 September 2008 a CV (listing education, experience, skills and publications) and three letters of recommendation to

Laurent Eyer

Observatoire de Geneve

1290 Sauverny

Switzerland

Phone : +41 22 379 23 61

Fax : +41 22 379 22 05

Email : laurent.eyer@obs.unige.ch

For more information see the following links:

Gaia Variability Processing and Analysis group homepage:

<http://isdc.unige.ch/Gaia>

Gaia homepage:

<http://www.rssd.esa.int/index.php?project=Gaia>

Geneva Observatory:

<http://www.unige.ch/sciences/astro/>

## ERC Starting Grant: New call for proposal has been published

On 24 July 2008, the European Research Council published a new call for proposals for the Starting Grant for Young Investigators. Pioneering frontier research in any field of science, engineering and scholarship is eligible for this funding.

- *Principal Investigator*: candidates can be of any nationality, and must have obtained their PhD (or equivalent degree [http://erc.europa.eu/pdf/phd-and-equivalent-doctoral-degrees-the-erc-policy\\_en.pdf](http://erc.europa.eu/pdf/phd-and-equivalent-doctoral-degrees-the-erc-policy_en.pdf)) more than three years but less than eight years prior to the opening date of the relevant call for proposals (justified extensions of this period may be accepted, see ERC guide for applicants - grant Schemes)

[http://erc.europa.eu/pdf/ERC\\_Guide\\_for\\_Applicants.pdf](http://erc.europa.eu/pdf/ERC_Guide_for_Applicants.pdf))

- *Host organization*: legally recognized public or private research organization situated in an EU Member State or an Associated Country. The Associated Countries are Albania, Croatia, Iceland, Israel, Liechtenstein, FYR of Macedonia, Norway, Republic of Montenegro, Serbia, Switzerland, and Turkey.
- *Funding*: up to 2.0 M euro per grant
- *Duration*: up to 5 years

Deadlines for applications vary for different fields of research:

- Starting Grant for Physical Sciences and Engineering - 29/10/2008
- Starting Grant for Social Sciences and Humanities - 19/11/2008
- Starting Grant for Life Sciences - 10/12/2008

To find out more about this funding opportunity, please go to: <http://erc.europa.eu/index.cfm?fuseaction=page.display&topicID=67>.

## Postdoctoral Research Associateships

Sponsor: Joint Institute for Laboratory Astrophysics

SYNOPSIS:

In-residence, postdoctoral research associateships, ranging from \$35,000 to \$49,000 each, in areas of research pursued at the Joint Institute for Laboratory Astrophysics, Boulder, Colorado are available. Eligible applicants are researchers of any nationality who have recently obtained the Ph.D. degree.

Deadline(s):

Established Date: Sept/10/1991

Follow-Up Date: Sept/01/2009

Review Date: Aug/25/2008

Contact: Cheryl Glenn

Address: Visiting Scientists Program

University of Colorado

440 UCB

Boulder, CO 80309-0440

U.S.A.

E-mail: [jilavf@jila.colorado.edu](mailto:jilavf@jila.colorado.edu)

Program URL: <http://jilawww.colorado.edu/employ/postdoc.html>

Tel: +1 303-492-7789

Fax: +1 303-492-5235

Deadline Ind: Receipt

Deadline Open: Yes

DEADLINE NOTE

Appointments are offered throughout the year with many appointments starting in September. It is advantageous to the applicants to submit application materials early in the year. Candidates whose applications are completed by November 1 may request to be considered for both Research Associates and the Visiting Fellows programs.

Award Type(s): Fellowship

In-Residence

Citizenship/Country of Applying Institution: Any/No Restrictions

Locations Tenable: U.S.A. Institution (including U.S. Territories)

Appl Type(s): Postdoctoral  
Target Group(s): NONE  
Funding Limit: \$0 SEE BELOW  
Duration: 1 YEAR(s)  
Indirect Costs: Unspecified  
Cost Sharing: No  
Sponsor Type: Non-Profit Organizations  
Geo. Restricted: NO RESTRICTIONS

#### OBJECTIVES:

The sponsor supports in-residence research in the fields of laser technology, optoelectronics, precision measurement, surface science and semiconductors, information and image processing, materials and process science, as well as basic research in atomic, molecular, and optical physics, precision measurements, gravitational physics, chemical physics, biophysics, astrophysics, and geophysical measurements.

#### ELIGIBILITY

Eligible applicants are researchers who have recently obtained the Ph.D. degree.

#### FUNDING

Awards are for one year and are generally renewable for a second year. Salaries are normally in the range of \$35,000 to \$49,000, depending upon experience, qualifications, and funding sources. Transportation to Boulder may be paid for the appointee and his/her spouse and minor children. An allowance for shipment of personal effects and an allowance for appropriate professional travel within the U.S. during the period of the appointment are available.

## 5 MEETINGS AND CONFERENCES

### *Reuniões e encontros*

#### **Multi-wavelength Astronomy and the Virtual Observatory**

1 - 3 December, 2008

European Space Astronomy Centre of the European Space Agency  
Villafranca del Castillo, Spain

The EURO-VO project, in the framework of the EURO-VO Astronomical Infrastructure for Data Access (AIDA), is organising an international workshop at ESAC, Villafranca del Castillo, Spain.

As new and older ground-based and space facilities will continue providing multi-wavelength data in a variety of formats and multi-chip instruments and large Surveys are expected to increase the data inflow by orders of magnitude, the VO is becoming indispensable for accessing and handling the exponentially increasing data volume. The goals of the workshop are to pinpoint the challenges multi-wavelength astronomy will be facing in the coming years and to identify how the unique capabilities intrinsic to the VO concept, such as simultaneous access to different archives, metadata describing the content and quality of the data packages or tools to e.g. cross-correlate the various datasets, can meet them.

To achieve these goals, the workshop will bring together experts in multi-wavelength galactic and extragalactic astronomy and scientists and engineers actively involved in the international VO initiative.

Among others the following topics will be addressed:

- Multi-wavelength science/surveys: present and future status, needs, tools, facilities
- Data quality in the VO (Metadata)
- Building Spectral Energy Distributions (SEDs) in the VO
- Filters in the VO
- VO standards for the access of multi-wavelength data
- Photometry data model [IVOA data model]

<http://www.euro-vo.org/pub/>

## 6 CALLS FOR PROPOSALS

### *Chamadas para propostas*

#### **Call for proposals to use the WSRT**

Observing proposals are solicited at this time for the winter semester of 2009 at the Westerbork Synthesis Radio Telescope (WSRT), which runs from 01 December 2008 to 31 May 2009. The proposal deadline for this call is

Tuesday September 16 at 12:00 UT (14:00 CET)

General information on the capabilities of the WSRT with its 14x25m dishes, suite of sensitive receivers spanning 115 MHz to 8.7 GHz, powerful and flexible correlator, and pulsar and VLBI backends, can be obtained via the Radio Observatory pages of the ASTRON web site (<http://www.astron.nl/p/observing.htm>). Some recent information about the WSRT is summarised in <http://www.astron.nl/p/WSRT2009AWSRT4.htm>.

Astronomers from all countries can apply for observing time on the WSRT; all proposals will be judged on their scientific merit and technical feasibility only.

Proposers should take note of EU encouragement to form teams with a European dimension, as it provides valuable financial support. When both the PI and at least 50% of the proposers have an affiliation outside The Netherlands, yet in an EU or affiliated country, their approved WSRT proposals are eligible for TransNational Access support (see <http://www.radionet-eu.org/tna>).

The demand for LST=12-18 is expected to be particularly high, due to a combination of long-term projects already allocated, and traditional requests for night-time (full synthesis) observations of targets both in the northern extragalactic sky as well as in the inner Galaxy. Proposers should very carefully justify requests for night-time observing, and while long-term projects can be requested for the upcoming deadline as usual, the next opportunity to propose for Large projects (in excess of 500 hours) is being shifted to 2009.

Urgent proposals can be submitted at any time; they will be rigorously assessed on scientific merit and must also demonstrate why the project could not be submitted before the last deadline and cannot wait for the next semester.

Service proposal admission is being expanded. These can be submitted at any time, and can now request up to 26 hours of telescope time. Service projects are intended for quick verifications, pilots, acquisition of some ancillary data, etc., and, if approved, will receive “filler” priority for the running semester, without any guarantee of being carried out.

WSRT proposals of any kind must be submitted only via the web-based tool (<http://proposal.astron.nl>). The proposal deadline for regular proposals for the period 01 Dec 2008 - 31 May 2009 is

Tuesday September 16 at 12:00 UT (14:00 CET)

R.C. Vermeulen

Director, Radio Observatory at ASTRON

#### **CALL FOR ESO OBSERVING PROPOSALS FOR PERIOD 83**

The Call for Proposals for observations at ESO telescopes during Period 83 (1 April 2009 - 30 September 2009) has been released. In this Period, two new instruments, SABOCA and APEX-SZ, both on APEX, are offered for the first time. FORS-1 is no longer offered, but its polarimetric module has been transferred to FORS-2, on which its blue-optimized CCD will also be available for observations in Visitor Mode. On La Silla, only Visitor Mode is supported, and the minimum run length of 3 nights will be strictly enforced: proposals including runs on La Silla telescopes with a duration of less than 3 nights will be rejected by the automatic proposal receiver. Large Programme proposals are encouraged on the 3.6-m telescope and the NTT, and can now last up to four years. (The maximum duration of Large Programme proposals for Paranal and Chajnantor remains two years.)

Deadline for proposal submission is 1 October 2008, 12:00 noon CEST.

The full Call for Proposals and the ESIFORM electronic submission package can be obtained at <http://www.eso.org/observing/proposals/index.html>

In order to avoid last-minute problems, users are strongly encouraged to fully verify their proposal well ahead of actual submission, using a preliminary version including all necessary fixed-format technical information, but possibly incomplete or with non-final text (see the ESIFORM manual for details).

### **SCIENCE VERIFICATION FOR ESO APEX SABOCA**

The Submillimetre APEX Bolometer Camera (SABOCA), a 39-channel bolometer array operating at 350 micron, will be commissioned on the APEX 12m telescope on Chajnantor in September 2008. Short proposals for science verification to be scheduled in the following months are invited. All observations will be performed in service mode by the local APEX staff and proposals will be coordinated between the APEX partners. Further details can be found at <http://www.eso.org/sci/activities/apexsv/sabocasv/>

The deadline for submission of SABOCA SV proposals is noon CEST 15 September 2008.

### **SCIENCE VERIFICATION FOR AMBER + FINITO**

AMBER is offered for the first time together with the external fringe tracker FINITO in Period 82. AMBER has already been in service with the UT's but using it with FINITO opens a new window on ground-based near-IR interferometry. A Science Verification run with AMBER + FINITO and three UT's - UT1, UT2, and UT4 - is scheduled for October 12-14 2008. The observations will be carried out in Service Mode by a dedicated team who will also assist PI's in the preparation and optimization of the OB's. Please refer to <http://www.eso.org/sci/activities/vltsv/amber/> for details.

Deadline for submission of AMBER + FINITO SV proposals is 10 September 2008.

### **XMM- Newton Announcement of Opportunity**

Exmo. Sr.,

Foi recentemente publicado um "Announcement of Opportunity" para a submissão de propostas de observações através do observatório espacial XMM-Newton da ESA. As propostas serão aceites até ao dia 10 de Outubro de 2008.

Para mais informações queira consultar a seguinte ligação:

[http://xmm.esac.esa.int/external/xmm\\_science/A08/](http://xmm.esac.esa.int/external/xmm_science/A08/)

Com os melhores cumprimentos,

Mário Amaral

### **SMA Call for Proposals**

Dear Colleague,

We wish to inform you of the current Call for Proposals for the Submillimeter Array (SMA), the radio interferometer on Mauna Kea built by the Smithsonian Astrophysical Observatory and the Academia Sinica Institute of Astronomy and Astrophysics. The SMA is currently accepting proposals from principle investigators from within the Harvard-Smithsonian Center for Astrophysics as well as from the worldwide astronomical community. The proposal deadline is 2008 September 11 for the observing semester 2008 November 16 through 2009 May 15.

SMA comprises of eight 6-m antennas operating at 230 GHz, 345 GHz, 420 GHz and 690 GHz bands. More information, technical details, instructions and tools for proposal preparation and submission can be found at <http://sma1.sma.hawaii.edu/>, the SMA Observer Center web site.

Questions or comments regarding the Call for Proposals can also be addressed to [propose@sma.hawaii.edu](mailto:propose@sma.hawaii.edu)

Sincerely,

Qizhou Zhang  
SMA TAC Chair

## Call for APEX SABOCA Science Verification

Dear colleague,

The Submillimetre APEX Bolometer Camera (SABOCA), a 39-channel bolometer array operating at 350 micron, will be commissioned on the APEX 12m telescope on Chajnantor in September 2008. ESO now invites short proposals for science verification from the ESO community. All observations will be performed in service mode by the local APEX staff. All proposals should be sent to [cdebreuc@eso.org](mailto:cdebreuc@eso.org) by noon CEST on Monday 15 September 2008. The proposals will be coordinated between the APEX partners. If you submit proposals to multiple partners, please clearly indicate in the proposal how much time you request from each partner.

The full call for proposals and further information can be found at

<http://www.eso.org/sci/activities/apexsv/sabocasv/>

Sincerely,

Carlos De Breuck, ESO APEX Project Scientist

## 7 OTHER ANNOUNCEMENTS

### *Outros anúncios*

#### **NOVAE - III Festival de Astronomia de Vila Nova de Paiva**

**Alexandre Aibeo** ; E-mail contact: [aaibeo@demgi.estv.ipv.pt](mailto:aaibeo@demgi.estv.ipv.pt)

No próximo mês de Setembro, entre os dias 12 e 14, irá decorrer em Vila Nova de Paiva a terceira edição do NOVÆ - Festival de Astronomia. Este festival organizado pela Câmara Municipal de V.N. Paiva procura, uma vez mais, ir ao encontro de todos os que se interessam por Astronomia. Seguindo uma linha própria que o separa da simples popularização científica, apresenta a ciência de forma acessível a todos, usando oradores de excepção que em simultâneo estão na linha da frente da investigação científica. A ciência apresentada por quem a faz, de uma forma divertida e informal.

À semelhança de edições anteriores o Festival de Astronomia de Vila Nova de Paiva iniciará os trabalhos com uma palestra dedicada a um tema geral na área da astronomia e seguirá para uma área fronteira, como a exploração espacial (edição de 2006), a exo-biologia ou a história da Astronomia (edição de 2007) entre outras. Seguir-se-ão uma série de conferências mais especializadas nos dois dias seguintes e uma palestra pública de índole geral no sábado à noite.

Para além das palestras, tendo em vista o aumento do leque de escolhas e a faixa etária do público alvo, a edição deste ano conta com duas oficinas dedicadas à construção e utilização de relógios de sol e rádio-astronomia e duas exposições permanentes.

Entre os oradores da edição deste ano estão a Doutora Mercedes Filho, o Doutor João Fernandes e o Dr. Pedro Russo.

As palestras e oficina de Relógios de Sol decorrerão no Auditório Municipal Carlos Paredes e a oficina de Rádio-Astronomia no parque Arbutus do Demo. Para mais informações consultar <http://novae.pt.to/> ou o portal de V. N. de Paiva em [www.cm-vnpaiva.pt](http://www.cm-vnpaiva.pt).