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Editors/*Editores*:
Rui Azevedo & Paula Stella Teixeira
(newsletter@news.universebox.com)

Contents

1 Abstracts of recently accepted papers
Resumos de artigos aceites recentemente

The Night Sky at the Calar Alto Observatory II: The Sky at the Near-infrared

Sánchez, S. F.[1]; Thiele, U.[1]; Aceituno, J.[1]; Cristobal, D.[2]; Perea, J.[3]; Alves, J.[1];

[1] Centro Astronómico Hispano Alemán, Calar Alto, (CSIC-MPG), C/Jesús Durbán Remón 2-2, E-04004 Almeria, Spain;
[2] Instituto de Astrofísica de Canarias, Via Lactea S/N, La Laguna, S/C de Tenerife, Spain;
[3] Instituto de Astrofísica de Andalucia, Camino Bajo de Huetor S/N, Granada, Spain;

We present the characterization of additional properties of the night sky at the Calar Alto observatory, following the study started by Sánchez et al. in 2007. We focus here on the night-sky brightness at the nearinfrared, the telescope seeing, and the fraction of useful time at the observatory. For this study we have collected a large data set comprising 7311 near-infrared images taken regularly along the last four years for the ALHAMBRA survey (J, H, and Ks bands), together with a more reduced data set of additional near-infrared images taken for the current study. In addition, we collected the information derived by the meteorological station at the observatory during the last 10 yr, together with the results from the cloud sensor for the last ∼2 yr. We analyze the dependency of the near-infrared night-sky brightness with the air mass and the seasons, studying its origins and proposing a zenithal correction. A strong correlation is found between the night-sky brightness in the Ks band and the air temperature, with a gradient of ∼-0.08 mag per 1°C. The typical (darkest) night-sky brightness in the J, H, and Ks-band are 15.95 mag (16.95 mag), 13.99 mag (14.98 mag), and 12.39 mag (13.55 mag), respectively. These values have been derived for the first time for this observatory, showing that Calar Alto is as dark in the near-infrared as most of the other astronomical sites in the world with which we could compare it. Only Mauna Kea is clearly darker in the Ks band, but not only compared to Calar Alto but to any other observatory in the world. The typical telescope seeing and its distribution were derived on the basis of the FWHM of the stars detected in the considered near-infrared images. This value, ∼1.0″ when converted to the V band, is only slightly larger than the atmospheric seeing measured at the same time by the seeing monitor, ∼0.9″. Therefore, the effects different from the atmosphere produce a reduced degradation on the telescope seeing, of the order of ∼10%. Finally we estimate the fraction of useful time based on the relative humidity, gust wind speed, and presence of clouds. This fraction, ∼72%, is very similar to the one derived in 2007, based on the fraction of time when the extinction monitor is working.

Accepted by: The Publications of the Astronomical Society of the Pacific, Volume 120, Issue 873, pp. 1244-1254
http://de.arxiv.org/abs/0809.4988

Metallicities for 13 nearby open clusters from high-resolution spectroscopy of dwarf and giant stars. Stellar metallicity, stellar mass, and giant planets

Santos, N. C.[1]; Lovis, C.[2]; Pace, G.[1]; Melendez, J.[1]; Naef, D.[2];

[1] Centro de Astrofísica, Universidade do Porto, Rua das Estrelas, 4150-762 Porto, Portugal;
[2] Observatoire de Genève, 51 ch. des Maillettes, 1290 Sauverny, Switzerland;
[3] European Southern Observatory, Casilla 19001, Santiago 19, Chile;

We present a study of accurate stellar parameters and iron abundances for 39 giants and 16 dwarfs in the 13 open clusters IC 2714, IC 4651, IC 4756, NGC 2360, NGC 2423, NGC 2447 (M 93), NGC 2539, NGC 2682 (M 67), NGC 3114, NGC 3680, NGC 4349, NGC 5822, NGC 6633. The analysis was done using a set of high-resolution and high-S/N spectra obtained with the UVES spectrograph (VLT). These clusters are currently being searched for planets using precise radial velocities. For all the clusters, the derived average metallicities are close to solar. Interestingly, the values derived seem to depend on the line-list used. This dependence and its implications for the study of chemical abundances in giants stars are discussed. We show that a careful choice of the lines may be crucial for the derivation of metallicities for giant stars on the same metallicity scale as those derived for dwarfs. Finally, we discuss the implications of the derived abundances for the metallicity- and mass-giant planet correlation. We conclude that a good

knowledge of the two parameters is necessary to correctly disentangle their influence on the formation of giant planets.

Accepted by: Astronomy and Astrophysics, Volume 493, Issue 1, 2009, pp.309-316
http://de.arxiv.org/abs/0811.2392

Color-Inclination Relation of the Classical Kuiper Belt Objects

Peixinho, Nuno[1,2,3]; Lacerda, Pedro[1]; Jewitt, David[1];

[1] Institute for Astronomy, University of Hawaii, 2680 Woodlawn Drive, Honolulu, HI 96822, USA;
[2] Centre for Computational Physics, University of Coimbra, P-3004-516 Coimbra, Portugal;
[3] Astronomical Observatory of the University of Coimbra, P-3040-004 Coimbra, Portugal;

We reexamine 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°-34°. Nonetheless, the optical colors are independent of inclination below ≈12°, showing no evidence of a break at the reported boundary between the so-called dynamically "hot" and "cold" populations near ≈5°. 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 nonlinear and stepwise behavior with a color break at ≈12°. Objects with inclinations >=12° show bluish colors, which are either weakly correlated with inclination or simply homogeneously blue, whereas objects with inclinations less than 12° are homogeneously red.

Accepted by: The Astronomical Journal, Volume 136, Issue 5, pp. 1837-1845 (2008)
http://de.arxiv.org/abs/0808.3025

The colour of the narrow line Sy1-blazar 0324+3410

Antón, S.[1]; Browne, I. W. A.[2]; Marchã, M. J.[3];

[1] SIM-IDL, Faculdade de Ciências da Universidade de Lisboa Campo Grande, C8, 1749-016 Lisboa, Portugal;
[2] University of Manchester, Jodrell Bank Centre for Astrophysics, Alan Turing Building, Oxford Road, Manchester, M13 9PL, UK;
[3] Faculdade de Ciências da Universidade de Lisboa Campo Grande, C8, 1749-016 Lisboa, Portugal;

Aims. We investigate the properties of the host galaxy of the blazar J0324+3410 (B2 0321+33) by the analysis of B and R images obtained with the NOT under good photometric conditions. Methods: The galaxy was studied using different methods: Sersic model fitting, unsharp-masked images, B-R image and B-R profile analysis. Results: The images show that the host galaxy has a ring-like morphology. The B-R colour image reveals two bluish zones: one that coincides with the nuclear region, interpreted as the signature of emission related to the active nucleus, the other zone is extended and is located in the host ring-structure. We discuss the hypothesis that the later is thermal emission from a burst of star formation triggered by an interacting/merging process.

Accepted by: Astronomy and Astrophysics, Volume 490, Issue 2, 2008, pp.583-587

HAWK-I: the high-acuity wide-field K-band imager for the ESO Very Large Telescope

Kissler-Patig, M.[1]; Pirard, J.-F.[1]; Casali, M.[1]; Moorwood, A.[1]; Ageorges, N.[2]; Alves de Oliveira, C.[1]; Baksai, P.[2]; Bedin, L. R.[1,3]; Bendek, E.[2]; Biereichel, P.[1]; Delabre, B.[1]; Dorn, R.[1]; Esteves, R.[1]; Finger, G.[1]; Gojak, D.[1]; Huster, G.[1]; Jung, Y.[1]; Kiekebush, M.[1]; Klein, B.[1]; Koch, F.[1]; Lizon, J.-L.[1]; Mehrgan, L.[1]; Petr-Gotzens, M.[1]; Pritchard, J.[1]; Selman, F.[2]; Stegmeier, J.[1];

[1] European Organisation for Astronomical Research in the Southern Hemisphere, Karl-Schwarzschild-Str.2, 85748 Garching, Germany;
[2] European Organisation for Astronomical Research in the Southern Hemisphere, Alonso de Córdova 3107, Vitacura - Santiago, Chile;
[3] Space Telescope Science Institute, 3700 San Martin Drive, Baltimore, MD 21218, USA;

We describe the design, development, and performance of HAWK-I, the new High-Acuity Wide-field K-band Imager for ESO's Very Large Telescope, which is equipped with a mosaic of four 2k× 2k arrays and operates from 0.9-2.4μm over 7.5′× 7.5′with 0.1″ pixels. A novel feature is the use of all reflective optics that, together with filters of excellent throughput and detectors of high quantum efficiency, has yielded an extremely high throughput. Commissioning and science verification observations have already delivered a variety of excellent and deep images that demonstrate its high scientific potential for addressing important astrophysical questions of current interest.

Accepted by: Astronomy and Astrophysics, Volume 491, Issue 3, 2008, pp.941-950

2 Abstracts of recent conference contributions
Resumos de trabalhos apresentados em conferências

Misaligned spin-orbit in the XO-3 planetary system?

Hébrard, G.[1] Bouchy, F.[1] Pont, F.[2] Loeillet, B.[1,3] Rabus, M.[4] Bonfil, X.[6,5] Moutou, C.[3] Boisse, I.[1] Delfosse, X.[6] Desort, M.[6] Eggenberger, A.[6] Ehrenreich, D.[6] Forveille, T.[6] Lagrange, A.-M.[6] Lovis, C.[7] Mayor, M.[7] Pepe, F.[7] Perrier, C.[6] Santos, N. C.[5,7] Queloz, D.[7] Ségransan, D.[7] Udry, S.[7] Vidal-Madjar, A.[1]

[1] Institut d'Astrophysique de Paris, UMR7095 CNRS, Université Pierre & Marie Curie, 98bis boulevard Arago, 75014 Paris, France;
[2] Physikalisches Institut, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland;
[3] Laboratoire d'Astrophysique de Marseille, Univ. de Provence, CNRS (UMR 6110), BP 8,13376 Marseille Cedex 12, France;
[4] Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain;
[5] Centro de Astrofísica, Universidade do Porto, Rua das Estrelas, 4150-762 Porto, Portugal;
[6] Laboratoire d'Astrophysique de Grenoble, CNRS (UMR 5571), Université J. Fourier, BP53, 38041 Grenoble, France;
[7] Observatoire de Genève, Université de Genève, 51 Chemin des Maillettes, 1290 Sauverny, Switzerland;

The SOPHIE Consortium started a large program of exoplanets search and characterization in the Northern hemisphere with the new spectrograph SOPHIE at the 1.93-m telescope of Haute-Provence Observatory, France. The objectives of this program are to characterize the zoo of exoplanets and to bring strong constraints on their processes of formation and evolution using the radial velocity technique. We present here new SOPHIE measurements of the transiting planet host star XO-3. This allowed us to observe the Rossiter-McLaughlin effect and to refine the parameters of the planet. The unusual shape of the radial velocity anomaly during the transit provides a hint for a nearly transverse Rossiter-McLaughlin effect. The sky-projected angle between the planetary orbital axis and the stellar rotation axis should be $\lambda = 70^\circ \pm 15^\circ$ to be compatible with our observations. This suggests that some close-in planets might result from gravitational interaction between planets and/or stars rather than migration. This result requires

confirmation by additional observations.
SF2A-2008: Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics Eds.: C. Charbonnel, F. Combes and R. Samadi. Available online at http://proc.sf2a.asso.fr, p.409
http://sf2a.cesr.fr/2008/2008sf2a.conf..0409H.pdf

3 New job and scholarship offers
Anúncios recentes de empregos e bolsas

Postdoctoral position at the Institut d'Astrophysique de Paris

The Institut d'Astrophysique de Paris is recruiting a postdoc to work on the scientific exploitation of the weak lensing effect in the forthcoming Planck mission.

Gravitational Lensing of the CMB - Preparation of the Planck Mission

Applications are invited for a Postdoctoral position at the Institut d'Astrophysique de Paris on the subject of gravitational lensing of the CMB.

The successful candidate will work with K. Benabed, S. Prunet and F. R. Bouchet on the scientific exploitation of the weak lensing effect in the Planck mission data. This will involve designing and implementing lensing estimators on the CMB, testing their efficiency against the expected/measured Planck systematics, and using them to extract a measurement of the lensing effect on the Planck data. This work will be part of a wider Planck Consortium project on the weak lensing in the Planck Data.

The candidate is expected to also interact with C. Pichon, on the use of massive N-Body simulations for CMB lensing, and the use of inverse methods to build lensing estimators, and with Y. Mellier, on the possible cross-correlation between the CMB lensing measurements and galaxy shear from the CFHTLS.

This position is funded for 24 months.

Applications will include a curriculum vitae, a short past research and current interests summary, a list of publication and 3 letters of reference, and must be sent before January 30, 2009. Electronic documents and applications are preferred. Please specify "CMB Lensing postdoc" in the subject line.

http://www.iap.fr/PostesAPourvoir/poste_POSTDOC_benabed_dec2008.html

Contact :
K. Benabed (benabed at iap.fr)
Institut d'Astrophysique de Paris
98Bis Bd Arago
75014 Paris, France

4 Meetings and conferences
Reuniões e encontros

First announcement: IAU Symposium 266 - Star Clusters

Star Clusters: Basic Galactic Building Blocks throughout Time and Space

http://www.astro.iag.usp.br/~iaus266/

Contact: iaus266@sheffield.ac.uk

10 - 14 August 2009

Held as part of the IAU General Assembly in Rio de Janeiro (Brazil)

SCIENTIFIC RATIONALE:

It is widely accepted that stars do not form in isolation, but result from the fragmentation of molecular clouds, which in turn leads to star cluster formation. Over time, clusters dissolve or are destroyed by interactions with molecular clouds or tidal striping, and their members become part of the general field population. Star clusters are thus among the basic building blocks of galaxies.

In turn, star cluster populations, from young associations and open clusters to old globulars, are powerful tracers of the formation, assembly and evolutionary history of their parent galaxies. Although their importance (e.g., in mapping out the Milky Way) had been recognised for decades, major progress in this area has only become possible in recent years, both for Galactic and extragalactic cluster populations. This area has seen a major recent investment in time and effort, largely thanks to significant new resources in theory, simulations and observations, including breakthroughs in computational power, the maturing of Hubble Space Telescope-driven science, deep and more precise data for large numbers of Galactic clusters, and an explosion of astrometric data (Hipparcos, UCAC2).

The Symposium will focus in particular on star clusters (including the full range from very young associations and open clusters to young massive star clusters and old globulars), and star cluster populations in the wider context of their parent galaxies. Putting these results and new developments related to star clusters as individual entities into the broader context of galaxy evolution is the next logical step, which requires the combined efforts of theorists, observers and modelers working on a large variety of spatial scales, and spanning a very wide range of expertise. We are now reaching the stage that we are within reach of answering a number of fundamental questions that will have a significant impact on our understanding of numerous related issues as well, ranging from the formation, assembly and evolution of galaxies, to the details of the very process of star formation itself. These two issues are the backbone of research in modern astrophysics. Thus, we propose to focus on the role of star clusters, of any size and age, and their stellar populations in the overall context of galaxy evolution, across space (from local to high redshift) and time (from currently forming to fossil remnants).

Star clusters are the observational foundation for stellar astrophysics and evolution, provide essential tracers of galactic structure, and are unique stellar dynamical environments. Star formation, stellar structure, and stellar evolution continue to benefit and improve tremendously from the study of these systems. Additionally, fundamental quantities such as the initial mass function (IMF) can be successfully derived from modelling either the Hertzsprung-Russell diagrams or the integrated velocity structures (i.e., for massive clusters, the velocity dispersions, leading to dynamical mass estimates, and combined with integrated luminosities and independent age estimates) of, respectively, resolved and unresolved clusters and cluster populations. Star cluster studies thus span the fields of Galactic and extragalactic astrophysics, while heavily affecting our detailed understanding of the process of star formation in dense environments.

Globular clusters are regarded as fossil records of the earliest epochs of galaxy formation, including that of our own Milky Way. At the same time, the young massive star clusters currently being formed in the most violent starburst environments may be viable proto-globular clusters. Thus, star clusters form an ideal testbed for stellar evolution theories and are in fact among the best tools to study extreme stellar populations, such as X-ray binaries or "blue stragglers", both of which are likely products of dynamical interactions within clusters. However, dynamical modeling of clusters and entire cluster systems, at any age, still poses a considerable challenge for both theory and computational requirements.

Recent advances in instrumentation are driving a renaissance in the study of Galactic clusters, while extragalactic cluster studies are significantly aided by the development of new instrumentation supporting ever wider fields of

view. New wide-field imaging cameras on several 4-8 meter telescopes offer the unique opportunity to study entire cluster populations to very faint magnitudes in a single pointing, both in the optical and near-infrared (e.g., VISTA). Complementing these photometric capabilities are a new generation of multi-object spectrographs and multiplexed integral-field units on 8-10 meter telescopes. In addition, from Chandra/XMM and GALEX at short wavelengths to the Spitzer Space Telescope in the mid and far-infrared, our observational window in which to study both the star clusters and their stellar populations are unsurpassed in terms of wavelength coverage and spatial resolution at the present time. With major efforts being expended on the planning for possible 20-50 meter "extremely large telescopes" (in both Europe and the USA), as well as the development of ALMA and the Square Kilometer Array, now is the opportune time to look forward to future progress in mapping a representative slice of the local Universe at the highest possible resolution and thus in the greatest detail ever achieved, across the entire wavelength range. Combining the emerging, unprecedented understanding of local stellar populations and their interstellar medium with observations of galaxies ("composite" stellar populations) at ever higher redshifts, we now have a fighting chance to constrain the evolution of the basic galactic building blocks throughout space and time.

Scientific Organising Committee:

Richard	de Grijs	(UK and China, co-chair)
Jacques	Lepine	(Brazil, co-chair)
Beatriz	Barbuy	(Brazil, ex-officio)
Giovanni	Carraro	(Italy)
Licai	Deng	(China)
Michael	Dopita	(Australia)
Yu	Gao	(China)
Doug	Geisler	(Chile)
Rosa	Gonzalez Delgado	(Spain)
John	Lattanzio	(Australia)
Stephen L.W.	McMillan	(USA)
André	Moitinho	(Portugal)
Anas	Osman	(Egypt)
Philippe	Prugniel	(France)
Ata	Sarajedini	(USA)
Alison	Sills	(Canada)

Workshop: New Directions in Cosmology

March 16 – 20, 2009

Beijing China

Kavli Institute for Theoretical Physics China, CAS(KITPC)

Institute of Theoretical Physics, CAS (ITP)

This international workshop is part of the KITPC 2009 program: Connecting Fundamental Physics with Observations to be held during the period Feb 16 - Apr 30, 2009.

http://www.kitpc.ac.cn/Activities/main.aspx?id=66835673

Among the topics:

New observational widows, new directions in dark matter and dark energy research, new ideas in early universe cosmology...

Organizers:

Robert Brandenberger (McGill U.) Rong-gen Cai (ITP/CAS)

Richard Easther (YALE) Tan Lu (PMO)

Ue-Li Pen (CITA) Elena Pierpaoli (USC)

Joe Silk (Oxford Astrophysics)

Key Participants:

Stefano Borgani (Trieste) Paolo Gondolo (Utah)

Bei Lok Hu (Maryland) Anupam Mazumdar (Lancaster)

Anze Slosar (Berkeley) Charling Tao (Marseille)

Richard Woodard (Florida)...

Sponsors:

Chinese Center of Advanced Technology and Sciences (CCAST)

Kavli Institute for Theoretical Physics China (KITPC), CAS

People interested in attending please contact Ms. Xin Tang

(tangxin@itp.ac.cn), Phone: 86-10-62582374

III Encontro "ASTRONOMIA E CIÊNCIAS ESPACIAIS: Comunicação e Educação"

23 e 24 de Janeiro de 2009, Espinho

Durante este Encontro será apresentado o plano de actividades que a Comissão Nacional para o AIA2009 preparou. Este encontro servirá também para apresentações de iniciativas que as diversas instituições estejam a preparar. Neste sentido, vimos formular os votos de uma participação de todos neste Encontro. As inscrições podem ser feitas na página http://ace2009.multimeios.pt, criada para o efeito.

5 Calls for proposals
Chamadas para propostas

European VLBI Network – Call for Proposals – Deadline 1 February 2009

Observing proposals are invited for the EVN, a VLBI network of radio telescopes spread throughout Europe and beyond, operated by an international Consortium of institutes (http://www.evlbi.org/).

The observations may be conducted with disk recording (standard EVN) or in real-time (e-VLBI).

The EVN facility is open to all astronomers. Use of the Network by astronomers not specialised in the VLBI technique is encouraged.

The Joint Institute for VLBI in Europe (JIVE) can provide support and advice on project preparation, scheduling, correlation and analysis. See EVN User Support at http://www.jive.nl.

Standard EVN Observing Sessions in 2009 (disk recording):

2009 Session 2	May 28 - Jun 18	18/21cm, 6cm, 5cm, ...
2009 Session 3	Oct 22 - Nov 12	18/21cm, 6cm, 5cm, 7mm ...

Proposals received by 1 February 2009 will be considered for scheduling in Session 2, 2009 or later. Finalisation of the planned observing wavelengths will depend on proposal pressure. Other wavelengths which may be scheduled in 2009 are 90cm, 50cm, 30cm, 1.3 cm and S/X.

e-VLBI Observing Sessions in 2009 (real-time):

2009 Feb 10 - Feb 11	(start at 13 UTC)	18/21cm, 6cm, 5cm, 1.3cm
2009 Mar 24 - Mar 25	(start at 13 UTC)	18/21cm, 6cm, 5cm, 1.3cm
2009 Apr 21 - Apr 22	(start at 13 UTC)	18/21cm, 6cm, 5cm, 1.3cm
2009 May 19 - May 20	(start at 13 UTC)	18/21cm, 6cm, 5cm, 1.3cm

There are three e-VLBI observation classes: general e-VLBI proposals; triggered e-VLBI proposals; short observations. General and triggered e-VLBI proposals submitted by the February 1st deadline will be considered for scheduling in the above e-VLBI sessions starting from March 2009. Requests for short observations may be submitted at any time up to three weeks prior to any e-VLBI session. Continuum and spectral line observations can be carried out.

See http://www.ira.inaf.it/evn_doc/guidelines.html for details concerning the e-VLBI observation classes and the observing modes.

Features for the next regular EVN and e-VLBI sessions:

Arecibo and Shanghai are now part of the e-VLBI array. Yebes 40-m may also join the array from March 2009. Please consult http://www.evlbi.org/evlbi/e-vlbi_status.html for the current e-VLBI array and for the availability of different eVLBI stations per observing band and for the dates of the e-VLBI observing sessions.

Yebes 40-m may join the regular EVN sessions at 1.3cm and at S/X from March 2009, and may be available at 6 and 5cm from Session II on.

MERLIN is normally available for joint EVN+MERLIN observations in all standard sessions, for any EVN wavelengths which MERLIN supports (18/21cm, 6/5cm, 1.3cm). However, due to the e-MERLIN construction only an incomplete MERLIN array will be available in 2009 due to limited resources. For updated information please consult the web at http://www.merlin.ac.uk//evn+merlin.html.

Large EVN projects:

Most proposals request 12-48hrs observing time. The EVN Program Committee (PC) also encourages larger projects (>48 hrs); these will be subject to more detailed scrutiny, and the EVN PC may, in some cases, attach conditions on the release of the data.

How to submit:

The on-line proposal submission tool Northstar now replaces the old Latex-email way of submission for all EVN, Global and e-VLBI proposals (except ToO proposals).
EMAIL PROPOSAL SUBMISSION IS NOT POSSIBLE ANYMORE.
Global proposals will be forwarded to NRAO automatically and do not need to be submitted to NRAO separately.

To use Northstar, people should register at http://proposal.jive.nl (only for the first proposal submission), enter the information about the investigators and the technical specifications of the proposed observations (equivalent to that previously in the coversheet) using the on-line forms, and upload a scientific justification in pdf or ps format. The scientific justification should be limited to 2 pages in length. Up to 2 additional pages with diagrams may be included. The deadline for submission is 23:59:59 UTC on 1 February 2009.

Additional information:

Further information on Global VLBI, EVN+MERLIN and e-VLBI observations, and guidelines for proposal submission are available at: http://www.ira.inaf.it/evn_doc/guidelines.html

The EVN User Guide (http://www.evlbi.org/user_guide/user_guide.html) describes the network and provides general information on its capabilities.

The current antenna capabilities can be found in the status tables. For the standard EVN see http://www.evlbi.org/user_guide/EVNstatus.txt. For the e-VLBI array see http://www.evlbi.org/evlbi/e-vlbi_status.html

The On-line VLBI catalogue (http://db.ira.inaf.it/evn) lists sources observed by the EVN and Global VLBI.

6 Other announcements
Outros anúncios

Portugal com forte representação para Abertura Mundial do AIA2009

Aluna do 11° ano de Palmela entre os astrónomos mais jovens no encontro de Paris.

Os vários Portugueses envolvidos na organização do International Year of Astronomy (IYA2009) marcam presença na cerimónia de abertura oficial do evento a 15 e 16 de Janeiro, em Paris, na sede da UNESCO.

A delegação nacional reúne por outro lado o presidente da Comissão Nacional do Ano Internacional de Astronomia (AIA2009), João Fernandes (Universidade de Coimbra), e uma das mais jovens astrónomas presentes na capital francesa, Mariana Vargas, vencedora em Portugal da última edição das Olimpíadas de Astronomia.

Mal sabia Mariana Alves Vargas, aluna do 11.° ano no Colégio ST. Peter's School, em Palmela, que o seu óptimo desempenho nas Olimpíadas de Astronomia do ano lectivo 2007-2008, ia permitir-lhe viajar no início de 2009 até Paris e assistir a um dos maiores eventos mundiais de astronomia.

O MUNDO ASTRÓNOMO EM PARIS

Com conferências sobre Galileu - figura de proa do evento -, sobre o sistema solar e sobre o universo em geral, proferidas por científicos de renome de todo o mundo (México, Estados Unidos, África do Sul, Japão, Itália,...), uma vídeo conferência em directo do telescópio europeu do Monte Paranal (Chile) e observações astronómicas à distância, o programa de lançamento do IYA2009 pretende ser um ponto de encontro para a rede de astrónomos profissionais e amadores que se associaram ao projecto e também uma festa para o público em geral.

Entre intervenientes e participantes de todo o mundo, a cerimónia internacional de abertura do IYA2009 vai contar com mais de 800 participantes, entre os quais se destacam os jovens astrónomos de mais de 100 países que, por indicação da organização internacional, são, com os coordenadores nacionais, os representantes do seu país.

Vão também estar presentes nas diferentes actividades de abertura do Ano Internacional de Astronomia o responsável internacional pelo IYA2009 o Português Pedro Russo e Rosa Doran, do Núcleo Interactivo de Astronomia (NUCLIO), membro da Comissão Nacional do AIA2009 e responsável do projecto global "Galileo Teacher Training Program".

REUNIÃO DAS MAIS ALTAS ENTIDADES

A Cerimónia de Abertura arranca na sede da UNESCO em Paris na Quinta-feira, 15 de Janeiro, pelas 9 horas, com as intervenções de Koichiro Matsuura, director geral da UNESCO, e de Catherine Cesarsky, Presidente da International Astronomical Union (IAU). Nomes como Hubert Reeves, Lord Martin Rees, Baruch Blumberg (Prémio Nobel de Medicina em 1976) e Bob Wilson (Prémio Nobel de Física em 1978) completam o "elenco de luxo" da abertura do IYA2009.

Um programa cultural astronómico é também proposto nos serões dos dois dias de actividade. Dia 15, a partir das 19h30, decorre uma recepção no Palais de la Découverte de Paris com vídeo, filme e música sobre a temática da Astronomia. No dia seguinte, tem lugar a cerimónia de encerramento, sendo possível, com convite, assistir ao espectáculo "Sun Rings", ode à terra e ao seu povo, composta por "barulhos celestes", escrita por Terry Riley e interpretada pelo Quatuor Kronos e pelo choro da UNESCO.

Desenvolvida com o duplo objectivo de tornar a astronomia acessível a todos e de fazer perceber o contributo dessa ciência na nossa cultura e sociedade, a iniciativa assinala o aniversário da primeira utilização do telescópio para observações astronómicas realizada por Galileu há 400 anos. Subordinado ao tema "The Universe, yours to Discover", o IYA2009 conta com o apoio das Nações Unidas, da UNESCO e da International Astronomical Union (IAU).

Para REPORTAGENS e ENTREVISTAS com Mariana Vargas, vencedora das Olímpiadas de Astronomia e representante de Portugal na Abertura Oficial do IYA2009, contacte a Ideias Concertadas através do e-mail (bl@ideiasconcertadas.pt) ou do telefone + 351 239 838 015/+351 91 854 20 70 (António José Silva).

CONTACTOS:

João Fernandes:
E-mail: jmfernan@mat.uc.pt

Pedro Russo:
Telefone: +49 89 320 06 195
Fax: +49 89 320 23 62
E-mail: prusso@eso.org

PROGRAMA COMPLETO
http://ama09.obspm.fr/ama09/open.php?body=oprog.html

MAIS INFORMAÇÕES:
http://ama09.obspm.fr/ama09/open.php?body=ohome.html

INFORMAÇÕES COMPLEMENTARES AIA2009:
http://www.astronomia2009.org

Galileo Teacher Training Program:
http://www.astronomy2009.org/globalprojects/cornerstones/galileoteachertraning

International Astronomical Union:
http://www.iau.org