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1 ABSTRACTS OF RECENTLY ACCEPTED PAPERS

Resumos de artigos aceites recentemente

Polarimetric performance of a Laue lens gamma-ray CdZnTe focal plane prototype

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A gamma-ray telescope mission concept [gamma ray imager (GRI)] based on Laue focusing techniques has been proposed in reply to the European Space Agency call for mission ideas within the framework of the next decade planning (Cosmic Vision 2015–2025). In order to optimize the design of a focal plane for this satellite mission, a CdZnTe detector prototype has been tested at the European Synchrotron Radiation Facility under an $\sim 100\%$ polarized gamma-ray beam. The spectroscopic, imaging, and timing performances were studied and in particular its potential as a polarimeter was evaluated. Polarization has been recognized as being a very important observational parameter in high energy astrophysics (>100 keV) and therefore this capability has been specifically included as part of the GRI mission proposal. The prototype detector tested was a 5 mm thick CdZnTe array with an 11×11 active pixel matrix (pixel area of 2.5×2.5 mm²). The detector was irradiated by a monochromatic linearly polarized beam with a spot diameter of about 0.5 mm over the energy range between 150 and 750 keV. Polarimetric Q factors of 0.35 and double event relative detection efficiency of 20% were obtained. Further measurements were performed with a copper Laue monochromator crystal placed between the beam and the detector prototype. In this configuration we have demonstrated that a polarized beam does not change its polarization level and direction after undergoing a small angle ($<1^\circ$) Laue diffraction inside a crystal.

Accepted by: J. Appl. Phys. 104, 084903 (2008)

<http://scitation.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=JAPIAU000104000008084903000001&idtype=cvips&gifs=yes>

Star Formation from Spitzer (Lyman) to Spitzer (Space Telescope) and Beyond

Alves, João¹; Trimble, Virginia²;

¹ Calar Alto Observatory;

² U. California Irvine and Las Cumbres Observatory;

A summary of JENAM 2008 Symposium 9 "Star Formation from Spitzer (Lyman) to Spitzer (Space Telescope) and Beyond", held in Vienna, 10-12 September 2008.

Accepted by: JENAM 2008 Proceedings

<http://www.joaoalves.org>

No evidence for mass segregation in young clusters

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Aims. We investigate the validity of mass segregation indicators commonly used in the analysis of young stellar clusters. **Methods.** We simulate observations by constructing synthetic seeing limited images of a 1000 massive clusters ($10^4 M_{\odot}$) with a standard IMF and a King density distribution function. **Results.** We find that commonly used indicators are highly sensitive to sample incompleteness in observational data, and that radial completeness determinations do not provide satisfactory corrections, rendering the studies of radial properties highly uncertain. On the other hand, we find that under certain conditions, the global completeness can be estimated accurately, allowing for the correction of the global luminosity and mass functions of the cluster. **Conclusions.** We argue that there is currently no observational evidence for mass segregation in young compact clusters since there is not a robust way to differentiate between true mass segregation and sample incompleteness effects. Caution should then be exercised when interpreting results from observations as evidence for mass segregation.

Accepted by: Astronomy and Astrophysics

http://www.astro.up.pt/~jascenso/mseg_v2.pdf

Time-Resolved Near-Infrared Photometry of Extreme Kuiper Belt Object Haumea

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We present time-resolved near-infrared (J and H) photometry of the extreme Kuiper belt object (136108) Haumea (formerly 2003 EL61) taken to further investigate rotational variability of this object. The new data show that the near-infrared peak-to-peak photometric range is similar to the value at visible wavelengths, $\Delta m_R = 0.30 \pm 0.02$ mag. Detailed analysis of the new and previous data reveals subtle visible/near-infrared color variations across the surface of Haumea. The color variations are spatially correlated with a previously identified surface region, redder in $B - R$ and darker than the mean surface. Our photometry indicates that the $J - H$ colors of Haumea ($J - H = -0.057 \pm 0.016$ mag) and its brightest satellite Hi'iaka ($J - H = -0.399 \pm 0.034$ mag) are significantly ($>9\sigma$) different. The satellite Hi'iaka is unusually blue in $J - H$, consistent with strong $1.5 \mu\text{m}$ water-ice absorption. The phase coefficient of Haumea is found to increase monotonically with wavelength in the range $0.4 < \lambda (\mu\text{m}) < 1.3$. We compare our findings with other Solar system objects and discuss implications regarding the surface of Haumea.

São apresentadas medições fotométricas do invulgar objecto trans-Neptuniano Haumea (anteriormente designado 2003 EL61) obtidas no infravermelho próximo (J e H) com o objectivo de investigar a variação do brilho deste objecto provocada pelo seu movimento de rotação. Observa-se que a amplitude da variação no infravermelho é semelhante à anteriormente observada no visível, $\Delta m_R = 0.30 \pm 0.02$ mag de pico a pico. Uma análise conjunta dos dados do infravermelho e visível revela uma região de cor visível/infravermelho ligeiramente diferente da cor média de Haumea. Essa região coincide com outra previamente identificada, mais escura e mais encarnada em $B - R$ do que a superfície média de Haumea. As medições aqui apresentadas mostram que Haumea ($J - H = -0.057 \pm 0.016$ mag) e o seu satélite mais brilhante, Hi'iaka ($J - H = -0.399 \pm 0.034$ mag), têm cores incompatíveis (diferença superior a 9σ). A cor $J - H$ extremamente azul de Hi'iaka é compatível com uma forte absorção a $1.5 \mu\text{m}$ provocada por gelo de água à superfície. O coeficiente de fase de Haumea aumenta monotónicamente entre os comprimentos de onda $0.4 \mu\text{m}$ e $1.3 \mu\text{m}$. São discutidas implicações destas medições para a superfície de Haumea. Finalmente, os novos resultados são analisados no contexto global do sistema Solar.

Accepted by: The Astronomical Journal

<http://www.ifa.hawaii.edu/~pedro/pdfs/2008arXiv0811.3732Lac.pdf>

2 ABSTRACTS OF RECENT CONFERENCE CONTRIBUTIONS

Resumos de trabalhos apresentados em conferências

Polarimetry with Laue Lens and CZT Pixel Detector

Caroli, E.¹ Curado da Silva, R. M.² Stephen, J. B.¹ Pisa, A.³ Auricchio, N.³ S. del Del Sordo, S.⁴ Donati, A.¹ Schiavone, F.¹ Landini, G.¹ Honkimäki, V.⁵ Frontera, F.³

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A new generation of high sensitivity telescope based on Laue lens coupled with high efficiency solid state focal plane detector is becoming a very challenging opportunity for hard X and soft gamma ray astronomy mission. For this kind of space mission, polarimetry is recognized as a very important observational parameter and therefore this capability should be included as one of the primary scientific issue. In this framework our group have realised a small experiment to demonstrate that the combination of a Laue Lens, built with copper mosaic crystals with a CZT/CdTe pixel detector, is capable to perform high sensitivity measurement of the polarization of a hard X ray sources contemporary with spectroscopy and imaging of the source itself. This experiment was performed at the begin of March 2008 using the ID15B beam line at ESRF (Grenoble). The experiment was based on a pixel CZT detector (5 mm thick array with 11×11 pixels of 2.5 × 2.5 mm²) with a sensitive area of 3×3 cm² and on a mosaic Cu crystal (15 ×15 mm², 4 mm thick) used in Laue diffraction configuration. During the tests the Cu crystal was rotated to simulate a Laue lens ring, and the detector was moved in order to get the diffracted beam always in the same pixel. The advantage of emulating a Laue Lens with one crystal is that the mosaic structure will not change as using different crystals reducing variability in the diffraction process. The beam provided at the ID15B have allow us to test the response of this system, with almost 100% linearly polarized photon at about 90, 270, 350 keV. In this paper we describe the experimental setup and we report on the preliminary results of this experiment, with particular emphasis to the presence of systematic effect introduced in the detected polarisation status of the impinging photon introduced by the Laue diffraction process.

2008 Nuclear Science Symposium, 2008 Nuclear Science Symposium, Medical Imaging Conference and 16th Room Temperature Semiconductor Detector Workshop, 19 - 25 October 2008 Dresden, Germany

<http://www.nss-mic.org/2008/NSSMain.asp>

X-Ray Polarimetric Measurements in Xenon Gas Filled Detectors

Botte, G. S.¹ Rachinhas, P. J. B. M.^{1,2} Dias, T. H. V. T.¹ Curado da Silva, R. M.¹ Veloso, J. A. F. C.³ Gouvêa, A. L.³ Carita, L. M. M.¹ Santos, F. P.¹ Távara, L. M. N.^{1,4} Conde, C. A. N.¹ Stauffer, A. D.⁵

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The development of polarisation sensitive X-ray detectors has been a subject of growing interest, especially in X-ray astronomy and astrophysics, since polarisation introduces a new observational parameter that will allow the improvement of the models characterizing astronomical X-ray emission sources. In this work we will present a Monte Carlo and an experimental study of the electron clouds produced in Xe when linearly polarised X-rays with energies up to 50 keV are absorbed in the gas. Cloud profiles show a memory of the polarisation direction and can be used to probe the polarisation of the absorbed X-rays, since the angular distribution of the photoelectrons becomes preferentially

aligned with the polarisation vector. The Monte Carlo code registers the growth of the electron cloud produced in the gas, reproducing in detail the x-ray photoionisation events and the cascade decay of the residual atomic ions (involving the emission of photoelectrons, Auger electrons and fluorescence X-rays) and following the slow-down process of all electrons in the gas to sub-ionization energies. The angular differential photoionisation cross-sections include non-dipole corrections to the dipole approximation. The experimental results will be obtained with a Xe-filled 2D spatial resolution detector, using the discrete linearly polarised X-rays obtained from a 60 keV X-ray tube by a 90° reflection on a pyrolytic graphite crystal. The system is aligned by previously observing the characteristic series of graphite lines with a HPGe detector.

2008 Nuclear Science Symposium, 2008 Nuclear Science Symposium, Medical Imaging Conference and 16th Room Temperature Semiconductor Detector Workshop, 19 - 25 October 2008 Dresden, Germany

<http://www.nss-mic.org/2008/NSSMain.asp>

Hydrodynamical Simulations of Slow Coronal Wind, Coronal Inflows and Polar Plumes

Pinto, R.¹ Grappin, R.¹ Wang, Y.-M.² L  orat, J.¹

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² Space Science Division, Naval Research Laboratory, Washington, DC 20375-5352;

We use a hydrodynamical time-dependent coronal flux tube model extending from $\sim 1 R_\odot$, where nonreflecting boundary conditions are applied, to $30 R_\odot$, which includes a transition region sustained by the equilibrium between thermal conduction, radiative losses and a prescribed mechanical heating flux. We recover the observed inverse relationship between asymptotic wind speed and expansion factor if the coronal heating rate is a function of the local magnetic field strength. We show that inflows can be generated by suddenly increasing the rate of flux-tube expansion, and suggest that this process may be involved in the closing-down of flux at coronal hole boundaries. We also simulate the formation and decay of a polar plume, by including an additional, time-dependent heating source near the base of the flux tube.

Journ  es de la SF2A 2008, June 30 - July 4, 2008, Paris

<http://ozone.obspm.fr/~sf2a/proc2008/pages-book.html>

Magnetic Reconnection by Alfv  n Waves

Pinto, R.¹ Grappin, R.¹ L  orat, J.¹

¹ Observatoire de Paris, LUTH, CNRS, 92195 Meudon, France;

We investigate the effects of the injection of alfv  n waves into the solar corona using an axi-symmetric 2.5 MHD numerical model extending from the top of the transition region up to about 15 solar radii. Transparent boundary conditions are applied at the top and bottom of the numerical domain and waves are injected by perturbing the alfv  nic characteristic at the bottom boundary. We study two kinds of magnetic configuration: a) a quadrupolar region inside an equatorial streamer and b) a small bipole within an unipolar flux polar coronal hole region. In configuration a), waves generate a pattern of convective flows (10 – 50 km/s) inside the streamer and simultaneously slow reconnection around the magnetic null point, which continuously rises upwards (≈ 25 km/s). In configuration b), we observe an increase in density, wind speed and mass flux along its central axis in a behaviour which resembles that of polar plumes in coronal holes. Current density accumulates around the magnetic null point.

Journ  es de la SF2A 2008, June 30 - July 4, 2008, Paris

<http://ozone.obspm.fr/~sf2a/proc2008/pages-book.html>

3 NEW JOB AND SCHOLARSHIP OFFERS

Anúncios recentes de empregos e bolsas

Postdoctoral Research Assistant in Cosmology

The Cluster of Excellence 'Origin and Structure of the Universe' announces the opportunity for a Postdoctoral position in the area of cosmology. Scientists who have or expect a PhD in Physics, Astrophysics or related fields by October 2009 are invited to apply. Successful applicants will be expected to conduct original research in theoretical, phenomenological or observational cosmology in an active interdisciplinary environment. We aim to fill the position with a start date in autumn 2009, initially for a period of two years, but with possibility of extension. The positions are part of a new research group being formed under the lead of Professor Jochen Weller at the Cluster of Excellence.

For the Postdoctoral position we are looking for a person with a background in either theoretical, phenomenological or observational cosmology including the areas of dark energy, large scale structure, clusters of galaxies and the cosmic microwave background. But this is an open call, so all cosmologists are encouraged to apply. The PDRA will be given the opportunity to work closely with the research groups involved in the excellence cluster (MPE, MPA, ESO, USM), but is also encouraged to pursue their own research program. The Excellence Cluster has access to the research infrastructure of the Garching Forschungszentrum Campus and the Leibniz Rechenzentrum.

The Cluster of Excellence is a joint research institution at the University Campus Garching near Munich. The cluster is funded by the Excellence Initiative of the Federal Government of Germany and represents a co-operation by the physics departments of the Technical University Munich and the Ludwig-Maximilians University, four Max-Planck Institutes (MPA, MPE, MPP, IPP) and ESO. The main goal of the cluster is to solve fundamental questions of astrophysics and cosmology (big bang, dark energy, dark matter, black holes, fundamental forces, particle hierarchy, nucleosynthesis etc.). Astrophysicists, particle and nuclear physicists face these challenges within the cluster and find solutions in a joint effort.

The salary is paid according to the German public service pay agreement TV-L E13. The advancement of women in science is an integral part of the cluster's and the university's policy. Therefore, women are especially encouraged to apply. Persons with disabilities will be given preference to other applicants with equal qualifications.

Applicants should prepare a covering letter and the following documents as pdf files: CV, publication list, past research activities and research plan. These files can be uploaded by clicking the Application button on the right. Further, applicants are asked to arrange at least two letters of recommendation to be sent to the address below (preferably electronically by e-mail to jochen.weller@usm.uni-muenchen.de). The closing date for receipt of applications is 2008 Dec 15.

Professor Jochen Weller
Ludwig-Maximilians-Universität
Excellence Cluster Universe der TU München
Boltzmannstr. 2
85748 Garching
Germany

AAO Research Fellow - Anglo-Australian Observatory

The Anglo-Australian Observatory (AAO) wishes to appoint a highly motivated Research Fellow. The successful applicant will conduct research on programs in collaboration with the Head of AAT Science and other AAO research staff. Specific ongoing research programs that the Research Fellow will contribute to focus on galaxy evolution, the role of star formation in galaxies and the significance of galaxy masses, environment and interactions. The Research Fellow will be supported in developing their own independent research program, and will be expected to assist in the operations of the Observatory for 33% of their time, with the other 67% being available for their own research.

The position is available from 1 January 2009 and is located on the Epping campus. The position is a 3-year appointment, subject to the satisfactory completion of a 6-month probation period. The salary will be in the range of \$55,432 to \$66,424 p.a. (Level 3.6 to Level 4.3), plus employer superannuation contributions. A fixed relocation allowance plus other relocation expenses (including airfare to Australia and return on completion of the appointment), may also be paid for applicants from outside the Sydney area. In order to apply you need to download the employment

information package from <http://www.aao.gov.au/local/www/jobs/> and follow its guidelines. Please lodge your application electronically to jobs@ao.gov.au Applications should include:

- a curriculum vitae outlining career history, education and qualifications, awards and distinctions.
- Full list of publications, separated into (a) accepted papers in refereed journals and (b) conference proceedings and other publications. Please do not include papers or preprints with your application.
- a brief outline of current research interests and proposed research programs.
- Contact details, including e-mail and phone, of three referees from whom references may be expected.

It is the applicant's responsibility to arrange for their application and all references to be received at AAO by the closing date, which is 5 December 2008.

Further information about the position may be obtained from <http://www.aao.gov.au/local/www/jobs>

Questions about the position may be addressed to Andrew Hopkins, Head of AAT Science. Phone +61 2 9351 7688 (before 17 Nov) or +61 2 9372 4851 (after 17 Nov); Fax +61 2 9372 4880; E-mail: ahopkins@ao.gov.au

HAO POSTDOCTORAL FELLOWSHIPS IN SOLAR/STELLAR PHYSICS

The High Altitude Observatory (HAO) in Boulder, Colorado announces its 2009 postdoctoral fellowship program.

Scientists at HAO conduct research related to solar/stellar interiors and variability (including asteroseismology), the lower solar atmosphere, corona and heliosphere, and terrestrial and planetary atmospheres, ionospheres and magnetospheres. Projects involving radiative transfer, hydrodynamics, magnetohydrodynamics, radiation hydrodynamics, plasma physics and other topics are pursued both out of fundamental physical interest and for their application to the above areas of research. Successful applicants will be expected to pursue research in collaboration with members of the scientific staff and other long-term visitors in these and related areas.

Postdoctoral Fellows are appointed for a maximum of 2 years beginning in September or October; a degree of flexibility is possible on the specific times of arrival and departure. Fellows are expected to work at HAO in Boulder, Colorado, with the exception of time spent participating in field research and observing programs. Fellows will have access to the HAO Linux/Unix computers, NCAR supercomputer systems, and the HAO and NCAR libraries and data archives.

Fellows will receive a salary commensurate with NCAR postdoctoral rates. The current annual rate is \$53,000 in the first year and \$55,000 in the second year. A travel budget of up to \$1,500 per year is also normally available. In accordance with NCAR policy, benefits include health insurance, vacation time and retirement contributions, and NCAR will provide assistance in finding Boulder accommodations.

Please see <http://www.hao.ucar.edu/people/visitors/postdoc.php> for complete application details. The deadline for applications is January 5, 2009.

Postdoctoral position at APC

The Astroparticule et Cosmologie (APC) laboratory in Paris, France, intends to appoint a postdoctoral researcher in observational cosmology. A PhD degree and relevant research experience are required. The position is for two years, starting on October 1st, 2009, or earlier.

The researcher will work on dark energy and more specifically on the Baryon Oscillations Spectroscopic Survey (BOSS), part of SDSS-III. Our team is involved in Large Scale Structure (LSS) analysis such as Luminous Red Galaxies (LRG) correlation function but aims at focusing on the measurement of baryon oscillations in the Lyman alpha forest.

APC has a strong observational cosmology group (Planck, SDSS, LSST, Virgo/LISA...) as well as a theory group. It is also involved in high energy astrophysics (HESS, Auger, Antares...) and neutrino physics (Borexino, Double Chooz).

Applications (CV, research statement and names of three referees) should be sent by email to aubourg@apc.univ-paris7.fr. Applicants should also arrange for up to three letters of reference to be sent to the same address.

The closing date is January 15, 2009.

POSTDOCTORAL FELLOWSHIPS in GALAXY FORMATION and COSMOLOGY

We expect to offer postdoctoral fellowships to start in the fall of 2009. We are looking especially for researchers working in the area of the formation, evolution and dynamics of galaxies and large-scale structure.

Our group is part of the Einstein Center in the theoretical section of the Racah Institute of Physics at the Hebrew University of Jerusalem. Astrophysics faculty include, among others, Jacob Bekenstein, Avishai Dekel, Yehuda Hoffman, Tsvi Piran, Re'em Sari and Nir Shaviv. Current postdocs working on galaxy formation are Tobias Goerdt and Daniel Ceverino. Yuval Birnboim and Noam Libeskind just left for CfA and AIP respectively. Several other postdocs work in high-energy astrophysics, planetary systems and gravity. There are currently ~15 astrophysics graduate students at the Racah Institute. We pursue extensive collaborations with leading groups in Europe and in the US, and can consider joint arrangements.

Interested candidates are invited to send their application material by email to Mrs. Dikla Soae at the above address by December 25, 2008. The material should include a curriculum vita, a list of publications, a brief summary of past, current and planned research, and three letters of recommendation.

Applicants are also asked to make an e-mail contact with Prof. Avishai Dekel at dekel@phys.huji.ac.il .

More details about postdocs in astrophysics at the Hebrew University are in:

<http://www.phys.huji.ac.il/post-fellow-astro.html>

ESA young graduate trainee opportunities - 2009

ESA has just published an opportunity for a “young graduate trainee” to work on some aspects of optics of Planck (see attached notice). The actual work to be done is flexible and of mutual agreement. The general description of YGT is at http://www.esa.int/SPECIALS/Careers_at_ESA/SEMRS5X04HD_0.html. It is a one year position. It could be at Estec or eventually also ESAC in Madrid. Normally YGTs should be recently graduated students (first-level science or engineering degree) but they could also be still in their last year. The deadline is 14 December.

If you know of any suitable candidates among to-be-graduated or recently-graduated students, please forward this note to them.

PhD Program in Astronomy at Leiden University

Email Submission Address: phdapplications@strw.leidenuniv.nl

Email Inquiries: phdapplications@strw.leidenuniv.nl

Information about the PhD program: <http://www.strw.leidenuniv.nl/education/PhD.php>

Leiden Observatory invites applications for at least ten PhD positions.

The four-year PhD program consists mostly of research under the supervision of one or more faculty members. Positions are available in all the research areas in which the Observatory is active. This includes cosmology, galaxy formation and evolution, interstellar matter and star formation, stars and planetary systems, computational astrophysics, high energy astrophysics, laboratory astrophysics, astrochemistry, and instrumentation. More information about research at Leiden Observatory can be found at <http://www.strw.leidenuniv.nl/research/>.

Leiden Observatory, founded in 1633, is the oldest university astronomy department in the world. With about 25 faculty, over 30 postdoctoral associates and over 40 PhD students it is the largest astronomy department in the Netherlands. Leiden is a charming university town with international flair. Most Leiden researchers have an international background. English is the common language.

During their thesis, Leiden PhD students are paid as civil servants, which means that they earn competitive salaries (the current gross salary, including allowances, increases from about EUR 28,000 in year 1 to about EUR 36,000 in year 4) and are eligible for both social security and retirement benefits. PhD positions are funded for four years.

Applicants should send a curriculum vitae, a list of all university courses taken and grades obtained, brief statements of research interests and experience, and arrange to have two letters of recommendation sent directly by the referees to the above (email) address. Email applications in pdf format are preferred. The successful candidates must have a MSc degree (or equivalent) by the starting date. The starting dates are negotiable.

Applications received by January 5, 2009 will receive full consideration.

The positions are open to candidates from all countries. The research will be carried out in the framework of the Netherlands Research School for Astronomy (NOVA). More information about the PhD program at Leiden Observatory can be found at <http://www.strw.leidenuniv.nl/education/PhD.php>.

Posdoc position at IFCA

We offer a postdoctoral contract to work on CMB data analysis, mostly related to the ESA Planck mission, but also open to the participation in other research activities within our group. A suitable candidate could start at his/her earliest convenience. Applicants should send to me (martinez@ifca.unican.es) their CV as well as the information of 3 researchers that could be contacted as reference. The contract will end by September 30th, 2010. For more information see our CMB group web page at the Instituto de Fisica de Cantabria (IFCA, Santander, Spain):

<http://max.ifca.unican.es/webcmb/news/news.html>

In addition, there is another postdoctoral position open at our institute to work on any of its research lines, in particular on cosmology and the CMB. More information can be also found in the same web page. Applicants interested in this position should contact me before December 10th.

Best regards, Enrique Martinez-Gonzalez

Postdoctoral position on X-ray studies of AGN/galaxies

The Astrophysics Group at FORTH and the Department of Physics at the University of Crete (Greece) advertise an opening for one postdoctoral position on X-ray studies of AGN/galaxies. The successful candidate is expected to be self-motivated and have experience in X-ray data analysis. Experience with the data acquisition and analysis from optical telescopes is a plus. For further details you may contact Prof. Iosif Papadakis at jhep@physics.uoc.gr. The duration of the position is for a period of 2 years and a net monthly salary is ~2,000 Euros. The starting date is negotiable but should be before the beginning of March 2009.

Interested applicants are requested to send a cover letter with a CV, publication record, and description of research interests along with the names of three individuals who could write letters of recommendation, to Prof. Nick Kylafis, Dept. of Physics, Univ. of Crete, P.O. Box 2208, GR-71003 Heraklion, Greece. Applications by e-mail to kylafis@physics.uoc.gr are strongly encouraged.

Information on the activities of the Crete Astrophysics Group and Skinakas Observatory can be obtained from: <http://www.physics.uoc.gr/en/menu/astro.php>

4 MEETINGS AND CONFERENCES

Reuniões e encontros

5th HELAS Asteroseismology Workshop “Synergies between solar and stellar modelling”

Dear colleague,

we cordially invite you to participate to the 5th HELAS Asteroseismology Workshop

“Synergies between solar and stellar modelling”,

The workshop will take place from Monday 22nd - to Friday 26th June 2009 in Rome, Italy

This first announcement gives you general information on the goals of the workshop. Registration will be opened by November 15. Please consult our web site (<http://www.helas-eu.org/workshops/roma/>) for the most recent information.

SCIENTIFIC RATIONALE

This meeting is an HELAS-NA5 workshop, intended to give a comprehensive overview of the current state of knowledge in solar and stellar modelling. The aim of the workshop is to compare and extend what we know from the detailed solar modelling, made possible by the helioseismic tools and by the recent analysis of the solar spectrum, on the modelling and understanding of generic stellar structures and their evolution. We will focus on how the tools developed for the Sun are applied to the other stars. The emphasis will be mainly devoted to the role of the input physics, and its relevant uncertainties, in the construction of stellar models and on the resulting predictions for general observable quantities and for asteroseismology.

In addition this workshop will be the occasion to mark and celebrate the 70th birthday of Lucio Paternó, Professor of Astrophysics at the University of Catania and Italian leading contributor to Helio- and Asteroseismology and study of solar and stellar structure.

PROPOSED TOPICS

The programme will feature among the following topics:

- 1) The standard solar model
- 2) Nuclear Reactions and Equation of state
- 3) The atmosphere, abundances and opacities
- 4) Convection in stellar models
- 5) Diffusion processes and element settling
- 6) Rotation and transport of angular momentum
- 7) Magnetic fields

SCIENTIFIC ORGANIZING COMMITTEE

Jørgen Christensen-Dalsgaard

Francesca D'Antona

Maria Pia Di Mauro

Werner Däppen

Guenter Houdek

Eric Michel

Mario Monteiro

Arlette Noels

Frank Pijpers

Hiromoto Shibahashi

Achim Weiss

LOCAL ORGANIZING COMMITTEE

Francesco Berrilli

Daniela Cardini

Riccardo Claudi

Maria Pia Di Mauro

Giuseppe Di Persio

Marcella Marconi

Vincenzo Rippepi

Giuliano Sabatino

Daniela Segatori

Giuseppe Severino

Catia Spalletta

Rita Ventura

ORGANIZATION

The workshop will be held in the conference room of the Academia Belgica, Via Omero 8, Rome. The Academia Belgica, representing the Belgian culture in Italy, was built in 1930 to celebrate the wedding between the Belgian Princess Marie-José and the Italian Prince Umberto of Savoy. The building is located near, and it is practically part of, Villa Borghese.

The number of participants is limited to 80. Those who will register after this limit has been reached will be placed

on a waiting list.

We foresee invited and contributed talks as well as poster session. The proceedings of articles and poster presentations will be published as referred articles on a special issue of the journal *Astrophysics and Space Science* (www.springer.com).

The registration fee, which has not been established yet, will be paid at the conference desk. It will include the coffee breaks, the lunches (Monday to Friday), the reception, the social tour, the social dinner and the proceedings.

A limited number of grants are available, based on need, and can be requested during registration. Priority will be given to PhD students and junior postdocs. The grant will consist of the possibility to get free registration fee and/or free accommodation. In order to be eligible, the following conditions must be fulfilled :

- must register in the HELAS website and in the “Who is Who” option of HELAS
- must submit an abstract for an oral or poster presentation through the symposium website before 1 March 2009;

The registration will be opened on, November 15th, 2008 at our web site <http://www.helas-eu.org/workshops/roma/>.

Information on accommodations will be given in the next announcement.

For inquiries please contact the LOC helas.roma@iasf-roma.inaf.it

We are looking forward to see you in Rome the LOC

Grassmannian Conference in Fundamental Cosmology (Grasscosmofun'09)

The Grassmannian Conference in Fundamental Cosmology (Grasscosmofun'09) is organized by the cosmology group of the University of Szczecin and will take place from 14th to 19th September, 2009 in Szczecin, Poland. The conference will be one of the accompanying events related to the celebration of Hermann Günther Grassmann birth bicentennial anniversary.

In about the same period of time (16-19.09.2009) there will be a parallel interdisciplinary conference (philosophy, history, linguistics, mathematics, physics) devoted to Hermann G. Grassmann. The last day of this conference (19.09.2009) will be a common day with Grasscosmofun'09.

<http://cosmo.fiz.univ.szczecin.pl/?q=node/67>

ACCRETION AND EJECTION IN AGN: A GLOBAL VIEW

The Brera Astronomical Observatory (INAF) together with the Department of Physics and Mathematics of Insubria University are organizing a workshop on the theme “ACCRETION AND EJECTION IN AGN: A GLOBAL VIEW” to be held in Como - Centro Volta on June 22-26 2009

We plan to cover major observational and theoretical aspects of fuelling, accretion disks, outflows and relativistic jets in AGN, with emphasis on their interconnection and relation to environment. A brief description of the meeting scopes is attached.

These topics are essentially multiwavelength in nature but rely especially on the high-energy side of the electromagnetic spectrum (X-rays, GeV and TeV gamma-rays). In particular, we expect presentations with exciting news from the successful operation of the AGILE and FERMI Gamma-Ray Telescopes and the second generation of Cherenkov telescope arrays.

The Scientific Organizing Committee includes

Mitch Begelman
Roger Blandford (tbc)
Annalisa Celotti
Andy Fabian
Neil Gehrels
Gabriele Ghisellini
Francesco Haardt

Chris Reynolds
Tim Heckman
Henric Krawcinsky
Laura Maraschi
Aneta Siemiginowska
Marek Sikora
Tad Takahashi
Meg Urry

We envisage 8 half day sessions, with 2 invited and 8 solicited/contributed talks each, plus poster presentations. A brief outline of the meeting with proposed topics is attached.

We are planning on about 100 participants.

This is the first mailing to be widely distributed. We apologize in advance if you will receive this notice more than once. The NEXT MAILING will be distributed in JANUARY, ONLY to those that will PREREGISTER on the meeting web-site or contact the LOC at the

web-mail address: agncomo09@bera.inaf.it

Watch the nascent workshop webpage <http://agncomo09.brera.inaf.it/> for more details.

A link for preliminary Registration/Abstract submission is already open.

Rationale

The first epoch of AGN studies (1960-1990) yielded a solid picture of an accretion flow onto a supermassive black hole as the power source of the dominant observed radiative output, the core optical, UV and X-ray continuum. The properties of radio-loud AGN (notably the superluminal expansion of radio core components) clearly implied ejection of collimated relativistic particles, but this concerned only a “minority” class and received attention from a minority of the AGN community.

The 90s opened up the gamma-ray window, revealing the full power of relativistic jets and posing the problem of their origin which is still not understood. At the same time it became clear that in many cases the power transported by jets could be of the same order as the gravitational power released in the accretion flow.

In the last decade evidences of outflows have become increasingly apparent also in the spectra of non radio loud AGN. Moreover the feed-back effects from the AGN on the surrounding ambient on different scales have received increasing attention in the framework of the coevolution of galaxies and black holes.

Is there a connection between accretion and ejection in AGN ? Can a global scenario be envisaged to account for accretion dominated and jet dominated activity in AGN and their different ratios in different systems? Does this ratio “evolve” with cosmic time ? A multiwavelength approach is essential to address these questions.

The meeting aims at reviewing the status of our knowledge and understanding of the above issues bringing together scientists of somewhat different communities to exchange facts and ideas. We expect substantial new input on the high energy emission of AGN already from the first year of GLAST operation and from the start of second generation of Cherenkov Telescopes as well as from advances in multiwavelength studies. The covered topics will include

- Fueling of supermassive black holes and AGN activity
- Accretion “modes”
- Accretion Disks and Outflows
- News from AGILE / FERMI and Cherenkov Telescopes
- Jets - Structure and emission mechanisms at small and large scale
- Radio-quiet vs. radio loud AGN: what makes the difference?
- Feed back from radio-loud /radio-quiet AGN
- Accretion and ejection: a balance?

First announcement of the IAP colloquium “The Lyman alpha Universe”

25th IAP Annual Colloquium, 6-10 July 2009, Paris

The Lyman-alpha line and related diagnostics are now routinely used in numerous astrophysical studies for example to probe massive star formation across the Universe, to study properties of the interstellar and intergalactic medium (ISM and IGM) across cosmic times, and to search for the most distant galaxies in the Universe.

Both observations and simulations have made enormous progress over the last decade. For example, surveys targeting Lyman-alpha have discovered new populations of galaxies out to the highest redshift, and sophisticated hydrodynamic and radiation transfer simulations have been developed. Furthermore many new instruments and experiments using Lyman-alpha and related diagnostics are being designed and constructed.

Given the fundamental importance of Lyman-alpha and its challenges, we felt it timely to hold an international conference on this topic at the Institut d’Astrophysique de Paris. The goal is to bring together experts in the field for an intensive discussion and a deeper understanding of the formation of Lyman-alpha and its interpretation. Ultimately, we hope to define new strategies and collaborative plans to bridge the gap between those concentrating on the high-redshift universe and those primarily interested in local galaxies. Participation of observers, modellers, and instrumentalists will be crucial for this effort. Time is now ripe to bring together various communities studying and using Lyman-alpha in a variety of exciting and diverse fields in a large international conference.

TOPICS COVERED :

- Starbursts from the local Universe to high redshift
- Lyman-alpha emitters, Lyman Break Galaxies
- Other Lyman-alpha sources (Lya blobs, sub-mm galaxies, radio galaxies, AGN)
- Lyman-alpha absorption systems
- Searches for the highest redshift galaxies
- Cosmic reionisation, cosmological uses of Lyman-alpha
- Lyman-alpha and UV radiation transfer modeling in galaxies and at cosmological scales
- Future instruments and surveys

For more information see <http://www.iap.fr/col2009/>

Organisers: Daniel Kunth (IAP), Daniel Schaerer (Geneva Observatory, CNRS)

Secretary: Chrystelle Massin (col2009@iap.fr)

ERASMUS INTENSIVE PROGRAM on “Supercomputing and Numerical Techniques in Astrophysics Fluid Flow Modelling”

University of Evora, Portugal

2-14 February 2009

<http://www.lca.uevora.pt/supercomputing2009>

This training school brings together graduate students, postdoctoral researchers and experienced European computational physicists and astrophysicists to discuss an integrated overview of the numerical and computational techniques that are most adequate to model different astrophysical fluid flow phenomena by means of supercomputing simulations. The participants will attend theoretical and laboratory courses on computational Astrophysics and use the supercomputing facility of the University of Coimbra.

Graduate students and post-docs residents in one of the partner countries (Portugal, Austria, France, Germany, Poland and Spain) have their traveling and subsistency expenses fully covered by the organization. They should apply to the project’ partner institution in their country.

Participants from other countries should email Prof. Dr. Avillez (mavillez@galaxy.lca.uevora.pt) for inquiries.

Deadline for applications: December 30

Total number of participants: 40

Sponsors:

European Union - Lifelong Learning Programme
European Science Foundation - ASTROSIM Program
ITT Visual Information Solutions

Partner Institutions:

Ecole Normale Supérieure Paris, France
Nicolaus Copernicus University, Torun, Poland
Polytechnic Institute of Portalegre, Portalegre, Portugal
Ruhr-University Bochum, Bochum, Germany
University of Coimbra, Coimbra, Portugal
University Complutense of Madrid, Madrid, Spain
University of Évora, Evora, Portugal (Chair)
University of Vienna, Vienna, Austria

Scientific Organizing Committee:

Pedro Vieira Alberto (U. Coimbra, Portugal)
Miguel A. de Avelaz (Chair, U. Evora, Portugal)
Dieter Breitschwerdt (U. Vienna, Austria)
Ana Gomez de Castro (U. Complutense, Spain)
Ralf-Jürgen Dettmar (U. Bochum, Germany)
Michał Hanasz (Nicolaus Copernicus U., Poland)
Patrick Hennebelle (ENS, Paris, France)
Francisco Neves (IPP, Portugal)

Local Organizing Committee:

Pedro Vieira Alberto (U. Coimbra, Portugal)
Miguel A. de Avelaz (Chair, U. Evora, Portugal)
Miguel Yanez Martinez (U. Evora)
Nuno da Câmara Manoel (U. Evora)

Courses:

Parallel Computing
MPI & Open MP
Fortran 95
Numerical Hydrodynamics (HD)
Numerical Magnetohydrodynamics (MHD)
Numerical Cosmic Rays - MHD
Smooth Particle Hydrodynamics
Adaptive Mesh Refinement
PIERNIK Code
Ramses Code
IDL and FastDL

Lecturers:

Pedro Vieira Alberto (U. Coimbra, Portugal)
Alfredo Palace Carvalho (U. Evora, Portugal)
Ernst Dorfi (U. Vienna, Austria)
Michał Hanasz (Nicolaus Copernicus U., Poland)
Patrick Hennebelle (ENS, Paris, France)
Francisco Neves (IPP, Portugal)
Orlando Oliveira (U. Coimbra, Portugal)
Romain Teyssier (CEA Saclay, France)
Christian Theis (U. Vienna, Austria)
Imanol Echave (ITT Visual Information Solutions, France)

Ten Years of Science with Chandra Symposium

The symposium “Ten Years of Science with Chandra: Chandra’s First Decade of Discovery” will be held in Boston, Massachusetts, USA from Tuesday, 22 September through Friday, 25 September 2009. The meeting will highlight key science results from the first ten years of operation of the Chandra X-ray Observatory.

More details are available at http://cxc.harvard.edu/symposium_2009

The SOC chairs

Antonella Fruscione, Douglas Swartz, Scott

“Invisible Universe International Conference”, June 29 - July 3, 2009, Palais de l’UNESCO-Paris, Second announcement, Registrations are open

Dear Colleague,

The LUTh (“Universe and Theory Laboratory” - CNRS UMR 8102, Paris Observatory), in collaboration with UNESCO and several national and international institutes organizes the “Invisible Universe International Conference” in Paris (France) from June 29 to July 3, 2009 at the Palais de l’UNESCO.

THE REGISTRATIONS ARE NOW OPEN, the list of invited speakers is almost completed and contributed talks are welcome.

We would be very grateful if you can disseminate widely the information and the Second announcement attached with this message among your colleagues and students.

For further information, please see the following web and e-mail addresses:

<http://universe2009.obspm.fr>, meeting.univ2009@obspm.fr

We would be very happy if you and colleagues can join us for this important event of the “World Year of Astronomy 2009”.

We look forward to seeing you in Paris on this summer,

Yours sincerely

Jean-Michel ALIMI

For the Local Organization Committee

Progress in understanding the physics of Ap and related stars

Rio de Janeiro, Brazil, 3-5 August 2009

Motivation:

Chemically Peculiar (CP) stars are stage to a diversity of physical phenomena, such as pulsations, convection, rotation, accretion, diffusion or magnetism. As a consequence, they offer unique and colorful laboratory for examining and studying these phenomena simultaneously, competitively and in parallel, ultimately enriching the whole gamut of stellar physics.

During this Joint Discussion many new results from high-quality data of CP stars and sophisticated theoretical models will be presented. The techniques used to infer the data, and the ingredients of the models with which the data is compared will be discussed. Future challenges, expected in the context of new ground-based instrumentation, and of space missions recently launched or in preparation, will give the final tone to the Joint Discussion.

Scientific Organizing Committee:

Margarida Cunha (Portugal - Chair)

Natalia Drake (Russia)

Mike Dworetzky (UK)

Oleg Kochukhov (Sweden)

Friedrich Kupka (Germany)

Francis Leblanc (Canada)

Lyudmila Mashonkina (Russia)
Richard Monier (France)
Ernst Paunzen (Austria)
Nikolai Piskunov (Sweden)
Hiromoto Shibahashi (Japan)
Barry Smalley (UK)
Werner Weiss (Austria)
Jozef Ziznovsky (Slovakia)

The Joint Discussion will take place during the **XXVII IAU General Assembly** and is organized by the IAU Working Group on Ap and Related Stars and coordinated by IAU Division IV, Stars. With the participation of Division V (Variable Stars) and Commissions 14 (Atomic and Molecular Data), 27 (Variable Stars), 29 (Stellar Spectra), 35 (Stellar Constitution) and 36 (Theory of Stellar Atmospheres).

Invited Speakers:

Saul Aldman (The Citadel, USA)
John Lanstreet (University of Western Ontario, Canada)
Lyudmila Mashonkina (Institute of Astronomy, Moscow, Russia)
Jaymie Matthews (University of British Columbia, Canada)
Georges Michaud (Universite de Montreal, Canada)
David Moss (tbc) (University of Manchester, UK)
Tanya Ryabchikova (Institute of Astronomy, Moscow, Russia)
Denis Shulyak (University of Vienna, Austria)
Gregg Wade (Royal Military College of Canada)
Werner Weiss (University of Vienna, Austria)
Jean-Paul Zahn (Observatoire Paris, France)

Scientific Programme:

The meeting will be organized in three sessions, each including invited talks, oral Contributions and a discussion.

Session 1 - Pushing the limit of instrument capabilities

Session 2 - A 3-D look into the atmosphere?

Session 3 - CP and related phenomena in the context of Stellar Evolution

For the detailed scientific programme and additional information on this Joint Discussion, please have a look at: <http://www.astro.up.pt/investigacao/conferencias/iau2009-ApStars/>

If you would like to receive future announcements of this Joint Discussion please follow this link <http://www.astro.up.pt/investigacao/conferencias/iau2009-ApStars/registracao.php>

ALMA and ELTs: A Deeper, Finer View of the Universe – First Announcement

ESO Garching, March 24-27, 2009

The workshop aims at exploring the scientific synergies between ALMA and the up-coming giant optical/infrared telescopes (GMT,TMT,E-ELT)

More information at: www.eso.org/almaelt2009 Organisers: L.Testi and M.Kissler-Patig on behalf of ESO

REGISTRATION:

Deadline - 15 December 2008 URL: <http://www.eso.org/sci/meetings/almaelt2009/registracao.html>

RATIONALE:

The main goal of the workshop is to bring the ALMA and ELT communities together, to identify the common science cases and to outline instrumentation/upgrade priorities for the ALMA and ELT facilities to support these.

The product of the workshop will be a report (rather than proceedings). The report will, on the one hand, present the common science cases in the areas of:

- fundamental physics, cosmology, and relics of the early Universe;
- galaxy and ISM evolution;
- star formation from re-ionization to the present;
- solar systems near and far.

On the other hand, the report will identify upgrade paths for ALMA and instrument priorities for the ELTs. The latter could be used as a feedback to the group investigating science with ALMA in the 2020 era, and to the instrumentation plans of the various ELTs.

The representatives from the different ALMA partners and ELT projects are part of the Science Organising Committee. Thus, we believe that the workshop could become an international milestone for all concerned projects.

The workshop is particularly timely, as it will feedback into the ALMA 2020 effort and the instrument suite selection of the E-ELT.

SOC:

J. Afonso (Lisboa Obs./ESAC)
 A. Blain (Caltech/ASAC)
 R. Gilmozzi (ESO/E-ELT)
 R. Hills (ESO/ALMA)
 R. Kudritzki (IfA/GSMT)
 P. McCarthy (Carnegie Obs./GMT)
 K. Morita (NRAO/ALMA)
 S. Shethman (Carnegie Obs./GMT)
 D. Silva (NOAO/GSMT)
 C. Steidel (Caltech/TMT)
 A. Wootten (NRAO/ALMA)

LOC:

A. Calamida (ESO)
 M. Kissler-Patig (ESO)
 C. Stoffer (ESO)
 L. Testi (ESO)

“Millimeter and Submillimeter Astronomy at High Angular Resolution”

June 8-12, 2009

Academia Sinica, Taipei, Taiwan

Sponsored by

Academia Sinica – Institute of Astronomy & Astrophysics

National Science Council

National Astronomical Observatory of Japan

National Radio Astronomical Observatory

Harvard-Smithsonian Center for Astrophysics

Co-hosted by

The Astronomical Society of the Republic of China

<http://www.asiaa.sinica.edu.tw/taipei09>

1. Motivation

In recent years, the Submillimeter Array (SMA), the Plateau de Bure Interferometer (PdBI), and the Combined Array for Research in Millimeter-wave Astronomy (CARMA), Nobeyama Millimeter Array (NMA) have been producing exciting scientific results at arc-second or even sub arc-second resolution. At the same time, large single-dish telescopes, including Nobeyama 45 m, IRAM 30 m, CSO 10 m, JCMT 15 m, NANTEN 4 m, APEX 12 m, SPT 10 m, GBT 100 m, LMT 50 m (near completion), CCAT 25 m (under development), continue to push the frontier both in sensitivity and wavelength. In 2011, early science using ALMA may start, and in 2012, full operation is planned to

start.

It is, therefore, most timely for us to hold a conference in 2009 to review the latest findings, obtained through millimeter and submillimeter observations at high angular resolution, and to outline the road map guiding us towards the ALMA era. The topics to be addressed at the conference are:

The solar system
Galactic low-mass and high-mass star formation
Outflows/Jets
Protoplanetary disks/Debris disks
Evolved stars
Nearby galaxies
Galactic center
AGNs and ultra luminous galaxies
High-Z galaxies
Astrochemistry
Instrumentation

2. Conference Organization

The conference will consist of 5 full-day sessions covering the above-mentioned topics. We expect to accommodate a total number of 250 participants. We plan to have about 40 invited talks (~30 minutes each). In addition, short oral contributions (~20 minutes each) and poster presentations will be arranged. Since the time for talks is limited, poster presentations will play an important role at this conference. There will be no formal conference proceedings. However, we plan to make all the presentations, including posters, available at our conference website.

3. Invited Speakers (confirmed)

Yuri Aikawa	Dan Marrone
Ray Blundell	Nimesh Patel
Bryan Butler	Luis F. Rodríguez
Paola Caselli	Kazushi Sakamoto
Huei-Ru Chen	Richard Schilizzi
Anne Dutrey	Hsien Shang
Josep Miquel Girart	Leonard Testi
Thijs de Graauw	Din-Van Trung
Frederic Gueth	Wei-Hao Wang
Myungshin Im	Jonathan Williams
David Jewitt	David Wilner
Ryohei Kawabe	Masako Yamada
Hyo-Ryeong Kim	Ji Yang
Kotaro Kohno	Min Yun
Chin-Fei Lee	Qizhou Zhang

4. Registration

There will be a registration fee (150 USD/person for early registration and 200 USD/person for regular registration), which covers the abstract book, lunch boxes, coffee/snacks for breaks, and the conference banquet. The deadlines for the early and regular registrations are February 28, 2009 and April 30, 2009, respectively. Registration will start on December 15, 2008 via our conference website (<http://www.asiaa.sinica.edu.tw/taipei09>).

5. Abstract Submission

All the participants are encouraged to present their latest scientific results at the conference. Abstracts of the presentations will be submitted through our conference website. Although we will try to accommodate as many talks as possible, a limited number of presentations will be selected for short oral contributions. The deadline for the abstract submission is March 31, 2009.

6. Location and Accommodation

The conference will be held in the newest conference hall on the main campus of the Academia Sinica (<http://www.sinica.edu.tw>), located on the eastern side of Taipei City, while your accommodation can be arranged in the

downtown area so that it would be easy for you to explore Taipei City during your free time. We will provide free shuttle buses (scheduled) between the hotels and the conference venue. For students and young scientists, low-cost accommodation on the campus of the Academia Sinica can be also arranged. More details on the accommodation will be provided in our conference website.

7. Science Organizing Committee (SOC)

Chris Carilli
Nagayoshi Ohashi
Minho Choi
Anneila Sargent
Pierre Cox
Leonardo Testi
Anne Dutrey
Min Yun
Paul T. P. Ho (Chair)
David Wilner
Wing Ip
Christine Wilson
Ryohei Kawabe
Satoshi Yamamoto
Karl Menten
Ji Yang
Lee Mundy

8. Local Organizing Committee (LOC)

Cindy Chiu
Patrick Koch
Sheng-Yuan Liu (Chair)
Chin-Fei Lee
Yu-Nung Su
Shigehisa Takakuwa

9. 2008-2009 Timeline

December 15: Second Announcement and open registration
February 28: End of early registration
March 31: End of abstract submission
April 30: End of regular registration
May 15: Third announcement/Program available
May 31: Final announcement June 07: Meeting

10. Questions

Please send all your questions to our conference mail address:
taiwan09soc@asiaa.sinica.edu.tw (to contact SOC members)
taiwan09loc@asiaa.sinica.edu.tw (to contact LOC members)

Also, please visit our conference website (<http://www.asiaa.sinica.edu.tw/taipei09>) to find more information on the conference.

11. Additional Services

We would be happy to make arrangements for you to extend your stay at ASIAA (<http://www.asiaa.sinica.edu.tw>) or at other institutions in Taiwan before and/or after the conference. Please send your request to the LOC.

5 CALLS FOR PROPOSALS

Chamadas para propostas

Supplemental Call for Proposals for HST Cycle 16 Observations

Paula Teixeira ; E-mail contact: pteixeir@eso.org

NASA and The Space Telescope Science Institute (STScI) announce a Supplemental Call for Observing Proposals for the Hubble Space Telescope (HST). Participation in this program is open to all categories of organizations, both domestic and foreign, including educational institutions, profit and nonprofit organizations, NASA Centers, and other Government agencies.

A serious electronic malfunction on HST in late September led to the postponement of Servicing Mission 4 (SM4). HST has been restored to operations, and we anticipate exhausting the pool of both existing Cycle 16 programs and Cycle 17 observations that can be brought forward before SM4 occurs. We are therefore issuing this call for supplementary programs using Wide-Field Planetary Camera 2 (WFPC2), the Advanced Camera for Surveys Solar Blind Channel (ACS/SBC), the Near-Infrared Camera and Multi-Object Spectrometer (NICMOS) and the Fine Guidance Sensors (FGS) to ensure that HST remains fully productive scientifically over this period.

This solicitation for proposals will be open through **Monday December 8, 2008 11:59pm EST**. The Astronomer's Proposal Tools (APT) version 17.2.6, which is required for Phase I Proposal Submission, will be released on Monday November 17, 2008 and can be downloaded from: <http://www.stsci.edu/hst/proposing/apt>. Submitted proposals will be reviewed by members of the Cycle 16 & 17 Time Allocation Committees. Results of the selection will be announced no later than January 13, 2009.

We anticipate allocating 1,000 to 1,200 orbits for an SM4 launch in the April/May timeframe. If SM4 is scheduled at a later date, the allocation will be increased accordingly.

Full details are given at this web site: <http://www.stsci.edu/hst/proposing/docs/cycle16supplement>

6 OTHER ANNOUNCEMENTS

Outros anúncios

Europe Unveils 20-Year Plan for Brilliant Future in Astronomy

Paula Teixeira ; E-mail contact: pteixeir@eso.org

Dear all,

Astronomy is enjoying a golden age of fundamental, exciting discoveries. Europe is at the forefront, thanks to 50 years of progress in cooperation. To remain ahead over the next two to three decades, Europe must prioritise and coordinate the investment of its financial and human resources even more closely. The ASTRONET network, backed by the entire European scientific community, supported by the European Commission, and coordinated by the CNRS, today presents its Roadmap for a brilliant future for European astronomy. ESO's European Extremely Large Telescope is ranked as one of two top-priority large ground-based projects.

Read more in ESO 43/08 at <http://www.eso.org/public/outreach/press-rel/pr-2008/pr-43-08.html>

Kind Regards,

The ESO education and Public Outreach Dept.

25 November 2008