

THE UKIRT INFRARED DEEP SKY SURVEY (UKIDSS): DATA ACCESS

ANDY LAWRENCE, UNIVERSITY OF EDINBURGH

STEVE WARREN, IMPERIAL COLLEGE LONDON

As part of the UK accession to ESO, it was agreed that all astronomers in ESO member states would have access to the data from the UKIRT Infrared Deep Sky Survey (UKIDSS – <http://www.ukidss.org>). This exciting survey is 3 magnitudes deeper than 2MASS over 7 500 square degrees, as well as having small deep areas, all the way down to a one square degree Ultra Deep Survey to $K = 23$. UKIDSS is therefore the real equivalent to optical sky surveys such as those from the Palomar, UK and ESO Schmidt telescopes, and the SDSS (see *The Messenger*, 108, 31). A substantial fraction of the survey is in the southern sky. The survey is being carried out by the new UKIRT Wide Field Camera (WFCAM), which has just been commissioned – see the press release at <http://outreach.jach.hawaii.edu/pressroom/2004-wfcam/>). The survey starts in March and will take seven years. There will be a sequence of releases, each of which is available only to ESO astronomers (and a small additional list of individuals in Japan) for eighteen months,

following which the data become public worldwide.

Access to reduced data and survey products will be through a queryable science archive known as the WFCAM Science Archive (WSA: <http://surveys.roe.ac.uk/wsa>). The WSA link is not live until the first release, but you can try out the interface by using the SuperCOSMOS Science Archive (SSA: <http://surveys.roe.ac.uk/ssa>). During the ESO-proprietary period, you will need to register for a username and password to obtain access. However the WSA team do not expect to vet and authorise every astronomer in Europe who potentially might want access to UKIDSS, and furthermore this list will change from month to month. Rather, we will be agreeing a list of “community contacts” to whom we will delegate the task of producing a list of authorised local usernames. Ingesting these into the WSA database will be automated, so that updating these lists as people leave and join should be easy to do at fairly regular intervals. “Community” will normal-

ly mean one particular university or observatory, but could potentially mean any well defined group of astronomers.

We have set up a preliminary list of community contacts which can be found on the UKIDSS web site at <http://www.ukidss.org/archive.html>. If you think your organisation or department needs to be added, please talk amongst yourselves to choose a contact, and send an email to the UKIDSS registration team below. Note that this can be done at any time from now on – the list can grow slowly. As soon as we have an agreed initial list, we will send out instructions for registering your members.

UKIDSS Registration Team:

Andy Lawrence, Edinburgh, al@roe.ac.uk
(UKIDSS Consortium PI)

Steve Warren, Imperial College London,
s.j.warren@imperial.ac.uk (UKIDS Consortium Survey Scientist)

Nigel Hambly, nch@roe.ac.uk (WSA Scientist)

Andy Adamson, a.adamson@jach.hawaii.edu (Head of UKIRT)



A central region of the Orion Nebula captured in the infrared by UKIRT's Wide Field Camera (WFCAM), courtesy of the Joint Astronomy Centre. (Data processing was by Chris Davis and Watson Varricatt). In a single exposure WFCAM can image a region the same area as the Full Moon.

SYMPOSIUM ON RELATIVITY, MATTER AND COSMOLOGY

11–14 July 2005, Bern, Switzerland

The EPS-ESA-ESO-CERN Symposium on 'Relativity, Matter and Cosmology', will take place from July 11 to 14, 2005 at the University of Bern. The Symposium will be part of the centenary celebrations of Albert Einstein's *annus mirabilis* and take place in the framework of the 13th General Conference of the European Physical Society, EPS13, under the general title 'Beyond Einstein – Physics for the 21st Century'. The EPS-ESA-ESO-CERN Symposium 2005 is expected to become one of the highlights of the 'World Year of Physics 2005', also declared the 'International Year of Physics' by the United Nations.

Plenary speakers will introduce the topics, and ample time and space will be provided for contributed papers and posters describing original work, preferably by young scientists.

Plenary Speakers in the EPS-ESA-ESO-CERN Symposium on 'Relativity, Matter and Cosmology' will include K. Danzmann, G. Drexlin, G. Efstathiou, J. Engelen, C. W. F. Everitt, E. Fiorini, W. Gelletley, F. Iachello, V. M. Kaspi, G. Ross, B. F. Schutz, J. Silk, D. Spergel, J. Stachel, and F. Wagner.

The following Sessions for contributed papers and posters are foreseen:

- The Fundamental Laws of Physics and the Constancy of Fundamental Constants
- Tests of Gravitational Theory and General Relativity
- Quantum Gravity
- Dark Energy
- Gravitational Waves
- String Theory and Extra Dimensions
- The Standard Model and Beyond
- LHC Physics and the Origin of Mass
- Neutrino Oscillations and Masses
- Matter in Extreme Conditions
- Dark Matter
- The Early Universe
- Cosmological Parameters
- Matter in the Universe
- Supernovae in Cosmology

EPS13 comprises two other co-located Conferences, one on 'Photons, Lasers and Quantum Statistics' and another one on 'Brownian Motion, Complex Systems and Physics in Biology'. It is anticipated that each one of these Conferences will attract about 300 physicists and astronomers, not only from Europe, but also from other continents. Registration for EPS13 will give access to all three conferences, which will be run in parallel and in close proximity to each other.

Further information can be found at <http://www.eps13.org>

ESO Workshop on

MULTIPLE STARS ACROSS THE H-R DIAGRAM

12–15 July 2005, ESO Headquarters, Garching, Germany

Multiple (i.e. triple, and higher order) stellar systems comprise a significant fraction of stellar populations. Their role in stellar physics has not yet been fully recognized. Stars of some specific types can originate only in multiple systems. An interplay between tides, nuclear evolution and dynamics is a rich field of contemporary research. The growing observational data on multiple systems with a variety of characteristics is used to critically examine the assumptions underlying stellar evolutionary models.

The main aim of the workshop is to bring together observers using different techniques (e.g. spectroscopy, high angular resolution imaging), from X-rays to far-IR, on ground-based single telescopes or interferometers, and on space observatories. The combination of techniques is vital for comprehensive studies of multiple stars that span a wide range of angular separations and stellar types.

The current state of observational and theoretical knowledge will be reviewed. Priorities for future studies will be identified, so as to provide the necessary input for further progress in the understanding of the genesis of multiple stars, their structure and their role for the study of stellar evolution.

The format of the meeting will consist of invited talks, contributed talks and posters.

SOC members: J. Bouvier, L. M. Close, P. P. Eggleton, R. F. Griffin, W. I. Hartkopf, S. Hubrig (co-chair), Ch. Leinert, M. Petr-Gotzens, M. Sterzik, A. Tokovinin (co-chair), S. Udry

LOC members: Ch. Stoffer, P. Bristow, A. Kellerer, M. Petr-Gotzens

Full details and registration information can be retrieved from <http://www.eso.org/gen-fac/meetings/ms2005/> or by e-mail to ms2005@eso.org

Deadline for registration: 30 April 2005

OPEN QUESTIONS IN COSMOLOGY: THE FIRST BILLION YEARS

22–26 August 2005, Garching, Germany

The accepted lore about the state of modern cosmology is that existing data constrain models well enough that few important questions remain to be either asked or solved. In the last year, a wealth of new data about the cosmological background radiation, early star and galaxy formation as well as cosmological evolution in general has been generated. The theoretical prejudice is that the current concordance cosmological model provides a description of our universe consistent with most of these observations. But does it provide the definitive framework against which these new observations can be tested? This meeting will present the latest data, confront them with conventional and alternative models, and review emerging technologies and expected data for their potential to challenge our current understanding of the universe.

Invited Speakers: K. Adelberger (OCIW), J. Bergeron (IAP), V. Bromm (U. Texas, Austin), P. Cox (IAS), L. Cowie (U. Hawaii), R. Ellis (Caltech), X. Fan (U. Arizona), A. Ferrara (SISSA), K. Gorski (JPL), Z. Haiman (Columbia), P. Jakobsen (ESA), K. Jedamzik (U. Montpellier), C. Lawrence (JPL), P. Madau (UCSC), S. Malhotra (STScI), K. Olive (U. Minnesota), J.-L. Puget (IAS), S. Ryan (Open University, UK), A. Songaila (U. Hawaii), J. Schaye (IAS), R. Schneider (OAA), C. Steidel (Caltech), F. Walter (MPIA), S. D. M. White (MPA)

Scientific Advisory Committee: X. Fan (U. Arizona), A. Ferrara (SISSA), K. Gorski (JPL), P. Jakobsen (ESA), B. Leibundgut (ESO), A. Loeb (Harvard), J. Silk (Oxford), A. Songaila (U. Hawaii), M. Umemura (U. Tsukuba), S. D. M. White (MPA)

Local Organising Committee: A. J. Banday, B. Ciardi, S. D. M. White (MPA); W. Freudling, B. Leibundgut, P. Shaver (ESO); M. Lehnert (MPE); E. D'Onghia (USM)

Further information can be found at: <http://www.mpa-garching.mpg.de/~cosmo/2005/>

Deadline for registration and abstract submission: 20 May 2005

ESO Conference on

SCIENCE PERSPECTIVES FOR 3D SPECTROSCOPY

10–14 October 2005, ESO Headquarters, Garching

The expansion in 3D instrumentation – obtaining spatially resolved spectra over an area of the sky – on large telescopes has been phenomenal over the past few years. Examples at ESO on the VLT are SINFONI, the Integral Field Unit (IFU) of VIMOS, the Argus mode of FLAMES; at Gemini the GMOS instrument has an IFU mode; OSIRIS is soon to reach Keck. There are also powerful consortium instruments such as SAURON and CIRPASS which were designed for rather specific problems. Several new tunable filters will see first light this year and sterling work continues to be carried out by facility IFU instruments on 4 m class telescopes such as at La Palma (INTEGRAL) and Calar Alto (PMAS). Accompanying this leap in instrumental capabilities, the volume of data delivered is set to increase as larger or multiple IFU's are planned, such as the MUSE or KMOS instruments for the VLT.

It is over five years since the last conference on 3D spectroscopy and time to assess where the technique is going and what are the current and future perspectives for science from 3D spectrographs. This conference will focus on the current science and the plans for the near future. All areas of astrophysics will be covered for which 3D spectroscopy brings special benefits – from the Solar System out to high redshift galaxies. There will be brief presentations of new instruments and techniques but the primary emphasis will be on the science from 3D spectroscopy.

The conference is co-sponsored by Euro3D, which is a European Union funded Research Training Network. Euro3D currently employs 10 post-docs at centres throughout Europe to work on integral field spectroscopy (<http://www.aip.de/Euro3D/>).

The meeting will consist of longer invited reviews with shorter contributed talks and posters. The proceedings will be published in the Springer ESO Astrophysics Symposia series.

SOC members: J. Allington-Smith (Durham), S. Arribas (IAC, STScI), A. Bunker (Exeter), R. Bacon (Lyon), G. Cecil (North Carolina), R. Davies (Oxford), C. Dumas (ESO), P. Ferruit (Lyon), R. Genzel (MPE), J. Bland-Hawthorn (AAO), A. Quirrenbach (Leiden), G. Wright (Edinburgh)

LOC members: J. Walsh (ESO), M. M. Roth (AIP), M. Kissler-Patig and C. Stoffer (ESO)

Further details are available at <http://www.eso.org/3Dspec05> or by e-mail to 3Dspec05@eso.org

Deadline for pre-registration: 15 May 2005

Deadline for final registration: 01 September 2005



FELIX MIRABEL BECOMES ESO REPRESENTATIVE IN CHILE

Starting on April 1, Felix Mirabel will take up a double role as ESO Representative in Chile and Head of ESO's Office for Science in Chile.

Felix Mirabel was born in 1944 in Uruguay. After finishing secondary school, he went to Argentina where he obtained a PhD in Astrophysics at the University of La Plata, and a Master degree in Philosophy from the University of Buenos Aires. He pursued post-doctoral studies at Jodrell Bank in the UK, at the University of Maryland, and then in Puerto Rico using the Arecibo radiotelescope. In 1990, after having worked at Caltech as a Guggenheim fellow, he moved to France working as director of research at the CEA (Saclay), where he stayed until joining ESO.

His scientific career has spanned the electromagnetic spectrum, from his early work in the radio domain to the optical, then infrared, millimetre and X- and gamma-ray astronomy. He has made use of a wide variety of the world's observational facilities, including all of ESO's major telescopes, from the 3.6 m to the SEST, from the NTT to the VLT.

His research has covered topics such as star formation, galactic structure, compact binaries, gamma-ray bursts and interacting galaxies. He is particularly well-known for

the identification of ultra-luminous infrared galaxies as a new class of objects and for his discoveries of microquasars in our galaxy, for which he has been awarded prizes in the US and in Europe, and last year a Doctorate Honoris Causa from the University of Barcelona.

On April 1, Felix Mirabel will take up a double role: he will be ESO's Representative in Chile as well as the Head of ESO's Office for Science in Chile. As ESO Representative, his main wish is to continue to improve the present very good relationship between ESO and Chile, both with its people and authorities. He feels that "this is a very good time to take up this post, following the excellent work done by Daniel Hofstadt." He sees continued strengthening of the relations with Chile not only through an enhancement of scientific capabilities of Chilean universities but also through cultural and educational programmes at large. In his post, Felix Mirabel will also strive to work in harmony with the US and Japan for the construction of ALMA.

In his other role as Head of ESO's Office for Science in Chile, his aim is to foster science across all ESO centres in cooperation with Chilean research groups. "When I arrived, I was impressed by the work of Danielle Alloin. Together with Daniel

Hofstadt, she has shaped Vitacura and made it an attractive astronomical centre in Chile. I also appreciate very much the fact that all ESO staff members, fellows and students are eager to enhance science in Chile, organizing by own initiative thematic groups of discussion and helping in a great variety of activities. Certainly, my new tasks won't leave me much time to continue my own research in the same way as before. But through this new role in the organization I aim to work for excellent conditions of astronomical research in Chile, and I am convinced that I will greatly enjoy the discoveries to be made at ESO by the young generation of astronomers."



ESO STUDENTSHIP PROGRAMME

The European Southern Observatory research student programme aims at providing opportunities to enhance the Ph.D. programmes of ESO member-state universities. Its goal is to bring young scientists into close contact with the instruments, activities, and people at one of the world's foremost observatories. For more information about ESO's astronomical research activities please consult <http://www.eso.org/science/>

The ESO studentship programme is shared between the ESO headquarters in Garching (Germany) and the ESO offices in Santiago (Chile). These positions are open to students enrolled in a Ph.D. programme at a university in an ESO member state or, exceptionally, at an institution outside ESO member states.

Students in the programme work on their doctoral project under the formal supervision of their home university. They come to either Garching or Santiago for a stay of normally one or two years to conduct part of their studies under the co-supervision of an ESO staff astronomer. Candidates and their home-institute supervisors should agree on a research project together with the ESO local supervisor. A list of potential ESO supervisors and their research interests can be found at <http://www.eso.org/science/sci-pers.html#faculty> and <http://www.sc.eso.org/santiago/science/person.html>. A list of current PhD projects offered by ESO staff is available at <http://www.eso.org/science/thesis-topics/>. It is highly recommended that the applicants start their Ph.D. studies at their home institute before continuing their Ph.D. work and developing observational expertise at ESO.

In addition, the students in Chile have the opportunity to volunteer for as many as 40 days/night work per year at the La Silla-Paranal observatory. These duties are decided on a trimester by trimester basis, aiming at giving the student insight into the observatory operations, and shall not interfere with the research project of the student in Santiago.

The closing date for applications is June 15, 2005.

Please apply by: filling the form available at <http://www.eso.org/gen-fac/adm/pers/forms/student05-form.pdf> and attaching to your application:

- a Curriculum Vitae (incl. a list of publications, if any), with a copy of the transcript of university certificate(s)/diploma(s).
- a summary of the master thesis project (if applicable) and ongoing projects indicating the title and the supervisor (maximum half a page), as well as an outline of the Ph.D. project highlighting the advantages of coming to ESO (recommended 1 page, max. 2).
- two letters of reference, one from the home institute supervisor/advisor and one from the ESO local supervisor,
- and a letter from the home institution that i) guarantees the financial support for the remaining Ph.D. period after the termination of the ESO studentship, ii) indicates whether the requirements to obtain the Ph.D. degree at the home institute are already fulfilled.

All documents should be typed and in English (but no translation is required for the certificates and diplomas).

The application material has to be addressed to:

European Southern Observatory
Studentship Programme
Karl-Schwarzschild-Str.2
85748 Garching bei München (Germany)

All material, including the recommendation letters, must reach ESO by the deadline (June 15); **applications arriving after the deadline or incomplete applications will not be considered!**

Candidates will be notified of the results of the selection process in July 2005. Studentships typically begin between August and December of the year in which they are awarded. In well justified cases starting dates in the year following the application can be negotiated.

For further information contact Christina Stoffer (cstoffer@eso.org).

Applications are invited for the position of

HEAD OF ADMINISTRATION

CAREER PATH: VII

Purpose and scope of the position: The main task is to provide efficient administrative services and advice to the Director General, Division Leaders and to staff members in the scientific and technical areas in the fields of financial planning and accounting, personnel management, purchasing, legal and contractual matters, information systems and building and site maintenance. As a member of the ESO Management the Head of Administration contributes essentially to the development of the overall policy, strategic planning, relations to the members of the personnel and maintains professional contacts at highest level outside the Organisation. ESO employs in total approximately 650 staff members and the Administration Division comprises the Administration at the Headquarters in Garching near Munich and the Administration in Santiago (Chile). The successful candidate will be supported by some 50 qualified staff members.

Professional requirements/qualifications: An appropriate professional qualification as well as substantial management and leadership experience within a scientific organisation, preferably international, and knowledge of administrative, legal, financial and personnel procedures are required. Excellent communication skills and a very good knowledge of English are essential. Good knowledge of the German language would be an important asset. Additional knowledge of other European languages, in particular Spanish, would be an advantage.

Remuneration and contract: We offer an attractive remuneration package including a competitive salary (tax-free), comprehensive pension scheme and medical, educational and other social benefits as well as financial support in relocating your family. The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence. Serious consideration will be given to outstanding candidates willing to be seconded to ESO on extended leaves from their home institutions. Either the title or the grade may be subject to change according to qualifications and the number of years of experience.

Staff category: International Staff Member.

Duty station/Place of residence: Garching near Munich, Germany, with regular duty travels to Chile.

Starting date: 1 September 2005.

Applications: If you are interested in working in a stimulating international research environment and in areas of frontline science and technology, please send us your CV in English and the ESO Application Form (to be obtained from the ESO Home Page at <http://www.eso.org/gen-fac/adm/pers/forms/>) by

30 April 2005.

For further information please contact Mr. Roland Block at rblock@eso.org.

You are also strongly encouraged to consult the ESO Home Page (<http://www.eso.org>) for additional information.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is a priori excluded. The post is equally open to suitably qualified male and female applicants.

Applications are invited for an Operations Staff Astronomer position in the Science Operations Department at the Very Large Telescope on Cerro Paranal near Antofagasta, Chile. This post is open to suitably qualified men and women:

OPERATIONS STAFF ASTRONOMER

CAREER PATH: V

Assignment: The successful candidate will support observing operations in both visitor and service mode at the VLT Unit Telescopes (UT) on Paranal. The tasks to be performed include the short-term (flexible) scheduling of queue observations, the calibration and monitoring of the instruments, and the assessment of the scientific quality of the astronomical data. Paranal Operations Staff Astronomers contribute to the challenge of operating a world leading astronomical facility so as to optimize its scientific output, have the opportunity to acquire expert knowledge of novel instrumentation, and may be given the overall responsibility for an instrument. Flexibility exists so as to tailor duties and responsibilities as a function of personal expertise and interests.

Operations Astronomers may be members of the ESO Science Faculty, with an appointment at the level of Assistant or Associate Astronomer. They will be expected and encouraged to actively conduct astronomical research up to 50 % of the time. 105 nights per year are spent at the observatory carrying out functional duties, usually in a shift of 8 days on Paranal, 6 days off. The rest of the time is spent in the Santiago office. Depending on qualification, expertise, and personal interest, Operations Astronomers may alternatively be offered an appointment with up to 20 % of the time for personal research and 135 nights per year to be spent on the observatory. Financial support for scientific trips and stays at other institutions, including in Europe, is foreseen for all Paranal Operations Astronomers.

Education: Ph.D. in Astronomy, Physics or equivalent.

Experience and knowledge: The Observatory is seeking a staff astronomer with substantial observing experience (at least three years). The ideal candidate will be active researcher and have excellent observation oriented research records, will be familiar with a broad range of instrumental, data analysis, archiving and observational techniques, and must be conversant with at least one major data reduction package such as MIDAS, iraf or IDL. Of special value would be a record of instrumental experience, such as the participation in the design, construction or calibration of existing instruments. Excellent communication skills, a good command of the English language, a working knowledge of Spanish or a willingness to learn and a strong sense of team spirit are essential.

Duty station: Paranal and Santiago, Chile.

Starting date: As soon as possible.

Contract: The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence. Promotions will be based on scientific as well as functional achievements.

Remuneration: We offer an attractive remuneration package including a competitive salary (tax-free), comprehensive pension scheme, medical, educational and other social benefits as well as professional training opportunities and financial support in relocating your family. Either the title or the grade may be subject to change according to education and the number of years of experience.

Applications consisting of your CV (in English language), the ESO Application Form (<http://www.eso.org/gen-fac/adm/pers/forms/>) and four letters of reference should be submitted by

30 April 2005.

For further information, please consult the ESO Home Page (<http://www.eso.org>) or contact Mrs Nathalie Kastelyn, Personnel Department, Tel. +49-89-3200-6217.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is a priori excluded.

Applications are invited for the position of an

ALMA BACK-END INTEGRATION AND DATA COMMUNICATION ENGINEER

CAREER PATH: V

Purpose and scope of the position: Within the European ALMA team, the selected candidate will take up responsibilities in the monitoring of production contracts and in the integration, commissioning and acceptance of the Back-end sub-system and related data communication infrastructures (fibre optic based system) of the ALMA radio telescope. As such, the selected candidate will be part of the ALMA Back-end Integrated Product Team (BE IPT). The position will involve duties in ALMA partner regions, Europe, North America and Chile in the form of frequent and occasionally extended missions.

Duties and responsibilities: The position will include several of the following tasks:

- Elaboration of BE integration & test plans and support for the development of an operations and maintenance plan in close collaboration with the System Engineering & Integration IPT.
- Definition of applicable Quality Management processes, mainly in the areas of production, integration and validation in the ALMA project.
- Participation in and organisation of product reviews.
- Monitoring of the installation, commissioning and acceptance of the BE sub-systems and fibre optic distribution infrastructures on site.
- Support for developing and maintaining the BE sub-system specifications and interfaces and for assuring that the sub-system designs comply with defined specifications.
- Monitoring of detailed sub-system performance of the BE sub-system technical budgets.
- Contribution to the ALMA configuration and change-control processes.
- Direct reporting to the ESO ALMA Back-end manager. Support the IPT manager in monitoring schedules and the technical performance of all back-end subsystems.

Professional requirements/qualifications: University degree (or equivalent) in Electrical Engineering or Physical Sciences. Further qualifications and experience in a scientific domain would be advantageous, e.g. a post-graduate experience in radio-astronomy research and/or in high speed fiber optic networks and advanced electronics industrial environment. At least three years of working experience in an engineering position on multidisciplinary, high technology, advanced electronics and fibre-optic data communication project(s).

Experience and knowledge: The ideal candidates will have experience in:

- Design, development, production installation and commissioning of advanced electronic systems, high speed optical data communication systems, optical components and related infrastructures.
- Establishing Assembly, Integration and Verification Plans communication and electronic systems.
- Configuration and Quality management.
- Excellent communication skills, a good command of the English language and a strong sense of team spirit are essential.

Duty station: Garching near Munich, Germany.

Starting date: As soon as possible.

Remuneration and contract: We offer an attractive remuneration package including a competitive salary (tax free), comprehensive pension scheme and medical, educational and other social benefits as well as financial help in relocating your family. The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence. The title or grade may be subject to change according to qualification and the number of years of experience.

Applications: If you are interested in working in a stimulating international research environment and in areas of frontline science and technology, please send us your CV (in English) and the ESO Application Form (<http://www.eso.org/gen-fac/adm/pers/forms/>) by

15 April 2005.

For further information please contact Mrs Nathalie Kastelyn, Personnel Department, Tel. +49-89-3200-6217. You are also strongly encouraged to consult the ESO Home Page (<http://www.eso.org/>) for additional information about ESO.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is a priori excluded.

Applications are invited for the position of a

SENIOR ENGINEER – HEAD OF PARANAL ENGINEERING DEPARTMENT

CAREER PATH: V

Purpose and scope of the position: The role of the Paranal Engineering Department is to carry out the assembly, integration and troubleshooting of the VLT (Very Large Telescope), the instrumentation of the VLT and of the VLTI (VLT Interferometry), of the VST (VLT Survey Telescope), VISTA (Visible and Infrared Survey Telescope), of all the facilities required on the Observatory (Power Station, Air Compressors, Chillers, etc), and to provide general engineering support of maintenance, troubleshooting and fault repair to nightly operations.

The Engineering Department of the Paranal Observatory comprises 5 engineering groups (Mechanical, Electronic, Software, Optics, and Instrumentation), with a total workforce presently consisting of 45 engineers and 15 technicians.

The telescopes and instruments are large, complex systems that involve many advanced technologies and that require a high level of engineering support.

Duties and responsibilities: Reporting to the Head of Engineering of the La Silla-Paranal Observatory, the successful candidate shall have the responsibility of:

- The four telescopes with their instruments making them available for Science operations 365 nights per year;
- The integration activity of new instruments and telescopes ensuring they are properly performed on time;
- The engineering support to the commissioning of the interferometric complex;
- Additional technical responsibilities including that of the Power Station and of the auxiliary systems (compressed air, chillers, etc.);
- The definition of operational procedures and long-term planning;
- The personnel management (in particular training and performance evaluation) and supervision of the five engineering groups;
- The preparation of the annual budgets and the scheduling of support staff.

Professional requirements/qualifications:

- University Degree in mechanical, optomechanical or aeronautical engineering.
- At least ten years of relevant on field engineering experience in large multi-discipline scientific/of high technology projects;
- Technical experience in optomechanic systems will be a plus.

see next page

Managerial Competence Criteria

- Ability to identify key strategic issues, opportunities and risks;
- Capability to communicate links between the Organization's strategy and the work unit's goals; establish/identify and communicate broad and compelling organizational directions;
- Strong managerial/leadership skills; with demonstrated experience to perform and/or oversee the analysis of complex human resources, financial, logistical or administrative management policy and program issues;
- Ability to effectively lead, supervise, mentor, develop and evaluate staff and design training/skills enhancement initiatives to ensure effective staff development;
- Excellent oral/written communication skills in English. Working knowledge of Spanish or the willingness to learn it;
- Proficiency with the Microsoft Office package.

Remuneration and contract: We offer an attractive remuneration package including a competitive salary (tax-free), comprehensive pension scheme and medical, educational and other social benefits as well as financial support in relocating your family. The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence.

Staff Category: International Staff Member. The grade may be subject to change according to qualifications and the number of years of experience.

Duty Station/Working Schedule/Place of residence: The ESO Paranal Observatory, at Cerro Paranal (120 km south of Antofagasta), is located at an altitude of 2600 m. The working system is typically 5/2 (Monday to Friday) or 8/6 with accommodation provided on site. After a first period of 5/2 the final turno will be agreed upon with the supervisor according to the operational requirements. The place of residence will be Antofagasta or Santiago.

Starting date: As soon as possible.

Applications: If you are interested in working in a stimulating international research environment and in areas of frontline science and technology, please send us your CV in English and the ESO Application Form (to be obtained from the ESO Home Page at <http://www.eso.org/gen-fac/adm/pers/forms/>) by

30 April 2005.

For further information please contact Mr. Walter Demartis at wdemarti@eso.org.

You are also strongly encouraged to consult the ESO Home Page (<http://www.eso.org>) for additional information.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is à priori excluded. The post is equally open to suitably qualified male and female applicants.

Applications are invited for the position of an

ALMA PROJECT PLANNER/SCHEDULER

CAREER PATH: V

The Atacama Large Millimeter Array (ALMA) is an international astronomy facility. ALMA is an equal partnership between Europe and North America, in cooperation with the Republic of Chile, and is funded in North America by the U.S. National Science Foundation (NSF) in cooperation with the National Research Council of Canada (NRC), and in Europe by the European Southern Observatory (ESO) and Spain. ALMA construction and operations are led on behalf of North America by the National Radio Astronomy Observatory (NRAO), which is managed by Associated Universities, Inc. (AUI), and on behalf of Europe by ESO.

The ALMA construction project has adopted a management structure based on the Integrated Product Team (IPT) concept. The IPT concept provides a method of managing tasks carried out across multiple organizations and locations. Each Level One WBS element is managed by an IPT responsible for delivering the required sub-systems on time, within the specified cost and meeting the project requirements. The ALMA Project Control Management System (PMCS) is centralized under the leadership of the ALMA Project Controller located in the ALMA offices in Santiago, Chile with staff located in Chile, Europe and North America.

Purpose and scope of the position: The successful candidate is part of the ALMA PMCS team and reports to the European Project Controller. Responsibilities include: maintaining integrated project schedules for activities conducted in Europe; coordinating work activities with IPT's; progressing schedules and assisting in identifying and resolving schedule conflicts; providing Earned Value Management (EVM) reporting and variance analysis in conjunction with the Project Controller; developing and controlling associated project documentation; providing change and problem management.

The position involves duty travels to ALMA partner regions, Chile, Europe and North America.

Duties and responsibilities:

- Using Project Planning & Control (PP&C) tools, document and maintain master and sub-project plans including schedule, tasks, milestones, resource assignments and time/expense tracking for large, geographically dispersed, IPT activities and subcontracted work.
- Configure and customize PP&C software programs including determining user requirements; establishing and maintaining multiple remote user accounts; establishing data interfaces; and developing internal and executive reports.
- Assist the Project Controller with analyzing and reporting on the required master and sub-project plans to plan, track and display IPT efforts and performance.
- Assist with the integration of cost accounting and other plans into the master project schedule to facilitate EVM; collect periodic updates and reconcile differences; develop, analyze and report on EVM metrics as directed by the Management IPT.
- Assist with development and maintenance of additional project management tools and processes to assist the Project Controller in overseeing the IPT efforts and activities.

Professional requirements/qualifications:

- University degree in Engineering or technology related fields.
- Significant experience using medium to high-end Project Planning & Control tools (e.g. Open Plan, COBRA, Primavera, MS Project Server, MS Project Professional, etc.).
- Experience of working in large collaborative multi-cultural project environments.
- Ability to coach technical and financial personnel in Earned Value Management (EVM) and project scheduling methods (e.g., critical path method).
- Project Management Professional (PMP) certification is a plus.
- Proficiency in MS Office applications (Outlook, Word, PowerPoint, Excel and Access).
- Multi-tasking competencies to manage multiple efforts or projects.
- Excellent communication skills, a good command of the English language and a strong sense of team spirit are essential.

Duty station: Garching near Munich, Germany.

Starting date: As soon as possible.

see next page

Remuneration and contract: We offer an attractive remuneration package including a competitive salary (tax free), comprehensive pension scheme and medical, educational and other social benefits as well as financial support in relocating your family. The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence. The title, grade and level of responsibility may be subject to change according to qualification and the number of years of experience. Serious consideration will be given to outstanding candidates willing to be seconded to ESO on extended leaves from their home institutions.

Applications: If you are interested in working in a stimulating international research environment and in areas of frontline science and technology, please send us your CV (in English) and the ESO Application Form (<http://www.eso.org/gen-fac/adm/pers/forms/>) together with the names of four individuals willing to provide professional reference letters. Applications should be submitted by

15 April 2005.

For further information please contact Mr. Roland Block, Head of Personnel Department, Tel.: +49-89-3200-6589. You are also strongly encouraged to consult the ESO Home Page (<http://www.eso.org/>) for additional information about ESO.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is a priori excluded.

PERSONNEL MOVEMENTS

1 December 2004 – 28 February 2005

Arrivals

Europe

Araujo Hauck, Constanza (RCH)	Paid Associate
Boxheimer, Jutta (D)	Graphics Designer
Delmotte, Nausicaa (F)	Paid Associate
Demartis, Walter (I)	Personnel Officer
Fechner, Matthias (D)	Student
Harrison, Paul (UK)	Paid Associate
Hastie, Morag Ann (UK)	Student
Kiupel, Katarina (D)	ERP System Specialist
Nilsson, Kim (S)	Student
Rahoui, Farid (F)	Student
Robinson, Mark (UK)	Programme Controller
Strazzullo, Veronica (I)	Student
Surdej, Isabelle (B)	Paid Associate

Chile

Amado Gonzalez, Pedro Jose (E)	Operations Astronomer
Arenas, Eduardo (PE)	Procurement Officer
Camuri, Massimiliano (I)	Electronics Engineer
Carstens, Johan (S)	Electronics Engineer
de Brito Leal, Luis Filipe (P)	Student
Gonzalez, Victor (RCH)	Software Engineer
Horst, Hannes (D)	Student
Markar, Kiriako (RCH)	Logistics Supervisor
Nicoud, Jean-Luc (CH)	Mechanical Engineer
Reveco, Johnny (RCH)	Software Engineer

Departures

Europe

Beckers, Jean-Louis (B)	Project Controller
Cioni, Maria-Rosa (I)	Fellow
Mackowiak, Bernhard (D)	Paid Associate
Huxley, Alexis (UK)	Software Engineer
Pignata, Giuliano (I)	Student

Chile

Alloin, Danielle (F)	Head of Science Vitacura
Arredondo, Diego (RCH)	System Administrator
Billeres, Malvina (F)	Fellow
Johansson, Lars Erik (S)	Paid Associate
Pantin, Eric (F)	Paid Associate
Ragaini, Silvia (I)	Student
Nakos, Theodoros (GR)	Student
Casquilho Faria, Daniel (S)	Student
Sbordone, Luca (I)	Student
Suc, Vincent (F)	Student

Recent Proceedings from the ESO Astrophysics Symposia

Volume	Title	Editors
16/2003	Astronomy, Cosmology and Fundamental Physics	Peter A. Shaver, Luigi DiLella, Alvaro Giménez
15/2004	Toward an International Virtual Observatory	Peter J. Quinn, Krzysztof M. Górski
14/2003	Extragalactic Globular Cluster Systems	Markus Kissler-Patig
13/2003	From Twilight to Highlight: The Physics of Supernovae	Wolfgang Hillebrandt, Bruno Leibundgut
12/2003	The Mass of Galaxies at Low and High Redshift	Ralf Bender, Alvio Renzini
11/2003	Lighthouses of the Universe: The Most Luminous Celestial Objects and Their Use for Cosmology	Marat Gilfanov, Rashid Sunyeav, Eugene Churazov
10/2003	Scientific Drivers for ESO Future VLT/VLTI Instrumentation	Jaqueline Bergeron, Guy Monnet
9/2003	The Origin of Stars and Planets: The VLT View	João F. Alves, Mark J. McCaughrean
8/2003	Gamma-Ray Bursts in the Afterglow Era	Enrico Costa, Filippo Frontera, Jens Hjorth
7/2003	Deep Fields	Stefano Cristiani, Alvio Renzini, Robert E. Williams
6/2003	Mining the Sky	Anthony J. Banday, Saleem Zaroubi, Matthias Bartelmann
5/2003	Quasars, AGNs and Related Research Across 2000	Giancarlo Setti, Jean-Pierre Swings

For further information look at <http://www.springerlink.com/openurl.asp?genre=journal&issn=1431-2433>

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