# **IAU Executive Committee**

#### President

Ronald D. Ekers CSIRO / ATNF PO Box 76 AU - Epping NSW 1710 Australia

Tel: +61 2 9372 4600 Fax: +61 2 9372 4450 rekers@atnf.csiro.au

#### President-Elect

Catherine Cesarsky
Director General
ESO
Karl Schwarzschildstr 2
DE - 85748 Garching
Germany

Tel: +49 893 200 6227 Fax: +49 893 202 362 ccesarsk@eso.org

## **General Secretary**

Oddbjørn Engvold IAU 98 bis, bd Arago FR - 75014 Paris France Tel: +33 1 43 25 83 58

Fax: +33 1 43 25 83 58 Fax: +33 1 43 25 26 16 iau@iap.fr

Home Institute

Inst.Theoretical Astrophysics Box 1029 Blindern NO - 0315 Oslo Norway

Tel: +47 22 856 521 Fax: +47 22 856 505 oddbjorn.engvold@astro.uio.no

# **Assistant General Secretary**

Karel A. van der Hucht SRON Ntl Inst for Space Research Sorbonnelaan 2 NL - 3584 CA Utrecht

The Netherlands

Fax: +31 30 254 08 60 K.A.van.der.Hucht@sron.nl

Tel: +31 30 253 57 29/56 00

#### **Vice-Presidents**

Beatriz Barbuy
IAG
University of São Paulo
Rua do Matao 1226
Cidade Universitaria
(Butantan)
BR - São Paulo SP 05508 900
Brazil

Tel: +55 11 3091 2810 Fax: +55 11 3091 2860 barbuy@astro.iag.usp.br

Cheng Fang
Astronomy Dpt
Nanjing University
Hankou Rd 22
CN - Nanjing 210093
China PR
from Dec 6, 2003:
Tel: +86 258 359 6817
Fax: +86 258 359 6817

fangc@nju.edu.cn

Kenneth A. Pounds
Dpt Physics & Astronomy
University of Leicester
University Rd
GB - Leicester LE1 7RH
United Kingdom
Tel: +44 116 252 3509
Fax: +44 116 252 3311
kap@star.le.ac.uk

Silvia Torres-Peimbert Instituto de Astronomía UNAM Apt Postal 70 264 MX - México DF 04510 México

Tel: +52 55 5622 3925/3906 Fax: +52 55 5616 0653 silvia@astroscu.unam.mx

Brian Warner

Astronomy Dpt

Private Bag
ZA - 7700 Rondebosch
South Africa
Tel: +27 21 650 2391
Fax: +27 21 650 3342
warner@physci.uct.ac.za

University of Cape Town

Robert E. Williams STScI 3700 San Martin Dr US - Baltimore MD 21218 USA Tel: +1 410 338 4963

Fax: +1 410 338 2617 wms@stsci.edu

### Advisors

Franco Pacini
(Outgoing President)
Dpt di Astronomia
Università Degli Studi
Largo E. Fermi 5
IT - 50125 Firenze
Italy
Tel: +39 055 275 21/2232

Tel: +39 055 275 21/2232 Fax: +39 055 220 039 pacini@arcetri.astro.it

Hans Rickman
(Outgoing General
Secretary)
Uppsala University
Astronomical Observatory
Box 515
SE - 751 20 Uppsala
Sweden
Tel: +46 184 715 971

Fax: +46 184 715 999 hans@astro.uu.se

# CONTENTS

	Preface	2
1.	Main Deadlines & Events	4
2.	Scientific Meetings 2.1. Future IAU Symposia 2.2. Future IAU Colloquia 2.3. IAU General Assemblies 2.4. New IAU Proceedings Series	5 5 8 9
3.	Executive Committee Matters  3.1. Working Group on the Status of Women in Astronomy  3.2. 2009: The Year of Astronomy  3.3. New Terms of Reference for the Minor Planet Center  3.4. Addresses of Presidents of EC Working Groups 2003-2006	10 12 12
4.	Division Matters 4.1. Addresses of Presidents 2003-2006 4.2. Composition of the Divisions 4.3. News from Divisions	14 14
5.	Commission Matters	18
6.	Meetings of the IAU Executive Committee 6.1. 77th Meeting of the Executive Committee 6.2. 78th Meeting of the Executive Committee 6.3. 79th Meeting of the Executive Committee	29 30
	XXVth General Assembly 7.1. Report on the XXVth General Assembly 7.2. Revisions of IAU Statutes & Bye-Laws 7.3. Resolutions of the XXVth General Assembly 7.4. Budget 2004-2006	31 32 35 40
8.	XXVIth & XXVIIth General Assemblies	42
9.	Special Announcements  9.1. The Cosmology Prize of the Peter Gruber Foundation (PGF)  9.2. The Peter Gruber Foundation Fellowships  9.3. Prof. Adriaan Blaauw turns 90 years	43 44 44
10.	Educational Activities	44
11.	IAU Representatives to International Organizations 2003-2006	46
12.	Membership	47
13.	IAU Publications	47
14.	Other Publications received	49
15.	Other Meetings on Astronomical Topics	51

### **PREFACE**

This is the first issue of the Information Bulletin published since the XXVth IAU General Assembly in Sydney, and I like to begin by expressing my appreciation to individuals and organizing committees for their contributing to this well-organized and memorable event. On behalf of us all I wish to thank, in particular, the National Organizing Committee chaired jointly by Harry Hyland and John Whiteoak and to their many enthusiastic helpers at the Sydney Conference and Exhibition Center. Financial support from ESO and NASA to secure the attendance of a number of participants is gratefully acknowledged. In addition I like to thank my predecessor Hans Rickman, and the staff of the IAU Secretariat, Monique Léger-Orine and Claire Vidonne, for their invaluable efforts and contributions in the preparation of this General Assembly, as well as during its subsequent stages of development.

The General Assembly in Sydney offered a rich and exciting science programme consisting of 6 Symposia, 21 Joint Discussions, 4 Special Sessions, in addition to scientific sessions in separate meetings of IAU Divisions, Commissions and Working Groups. Each and one of us could sample only a selected few presentations from the many concurrent scientific sessions, but we are all getting a second chance to enjoy a larger part of the scientific agenda as the meetings organizers and the IAU Publisher are all doing their best to ensure that Proceedings from the various Symposia, from Joint Discussions and Special Sessions can be issued in 2004.

Among several important issues dealt with in Sydney was the decision that Proceedings from IAU sponsored meetings in 2004 and onwards, shall first be published electronically and subsequently supplemented with paper versions of the same. We expect that the electronic Proceedings Series, which also will include IAU Colloquia, will be appreciated by today's astronomers as well as by science libraries.

Another important decision concerned the need for a notable revision of the Statutes and Bye-Laws. The Union has undergone dramatic changes in the course of the 75 years since the 1st General Assembly at the Palais des Académies in Bruxelles, when the delegates could all be captured in one group picture. It is inevitably a greater challenge to manage the much larger and more unwieldy Union of today. The IAU Commissions and Working Groups constitute the science backbone and reasons for the existence of the Union. The Union shall strive to be responsive to its members, especially on scientific matters, and the introduction of the IAU Divisions at the XXIInd GA in Hague was done with this intent. The revised statutes now permit decisions on matter of the scientific Divisions and Commissions to take effect in the course of weeks rather than the three years between GAs, and members' initiative can be implemented by Divisions with much greater flexibility.

Out of the initial 32 Standing Committees from 75 years ago, which today are named IAU Commissions, many have survived, some have disappeared and new ones have been created as new activities called for it. The revised Statutes invite to a regular scrutiny of the Commissions, which by default states that a Commission will disappear after six years, unless its Division concludes that the Commission still serves a purpose in the interest of its members. Hence, a consequence of the revised Statutes is that authority on matters of Commission and Working Groups is shifted to the Divisions. One may conclude that IAU members have far more influence than before in the Union's affairs. I urge you to make

I take this opportunity to welcome the vitalizing contingent of 894 new Individual Members to the Union, which now has grown to comprise a total of 9114 members

use of it

representing 67 nations.

Our membership database is currently being updated with the aims to make it more 'user friendly' and to turn it into an efficient tool for communication with and between the members of the Union. We now take advantage of this new tool and make available to the majority of the members only the electronic version of this issue of the bi-annual IAU Information Bulletin. The paper version of the issue is mailed to our new Individual Members, to individuals for which we currently do not have reliable e-mail addresses, to National Member organizations and to a selected few others. For forthcoming issues we foresee that the need for the paper version will be steadily decreasing.

To all of you, your comments, suggestions, criticism and other input on matters of the Union are welcome. Your involvement and concern will help us maintaining a timely and well-functioning Union.

Finally, I extend the best wishes of the IAU Officers and Secretariat to all of you for a professional and personally rewarding 2004!

Oddbjørn Engvold, General Secretary

### 1. MAIN DEADLINES AND EVENTS

#### FOR COMPLETE & UPDATED INFORMATION

please see: http://www.iau.org/IAU/News/deadlines.html

Proposals for IAU Symposia, Colloquia, and co-sponsored meetings planned for 2005 must reach the Assistant General Secretary See http://www.iau.org/IAU/Organization/officers.html
no later than February 15, 2004!

in order to be considered at the 79th Executive Committee meeting. See http://www.iau.org/IAU/Activities/meetings/

2004 2-3 Officers Meeting Feb. (Paris, France) Proposals for IAU Scientific Meetings 15 1-15  $\,$  SPM 222: The Interplay among Black Holes: Stars & ISM in Galactic Nuclei March (Rio Grande do Sul, Brazil) Proposals due for agenda items of EC 79 15 12-16 CQM 195: Outskirts of Galaxy Clusters: Intense Life in the Suburbs (Torino, Italy) Contributions due for Information Bulletin 95 (June 2004) April 24-26 79th Executive Committee Meeting May (México City, México) 7-11 CQM 196: Transit of Venus: New Views of the Solar System & Galaxy June (Preston, UK) 14-19 SPM 223: Multi-Wavelength Investigations of Solar Activity (St. Petersburg, Russian Federation) July 8-13 SPM 224: The A-Star Puzzle (Poprad, Slovakia) 19-23 SPM 225: Gravitational Lensing Impact on Cosmology (Lausanne, Switzerland) Aug. 31-Sept. 4 CQM 197: Dynamics of Populations of Planetary Systems (Belgrade, Serbia & Montenegro) Sept. 13-17 SPM 226: Coronal & Stellar Mass Ejections (Beijing, China) 2005 Proposals for new Members due by Divisions or EC Working Groups Nov. 15 Submit Resolutions type A with financial implications Submit Resolutions type B with financial implications Proposals for new Members due by Adhering Organizations Dec. 15 2006 Applications for Peter Gruber Foundation fellowship April 30 14-25 XXVIth IAU General Assembly Aug. (Praha, Czech Republic) 2009 2-15 XXVIIth IAU General Assembly Aug. (Rio de Janeiro, Brazil)

### 2. SCIENTIFIC MEETINGS

#### 2.1. FUTURE IAU SYMPOSIA

SPM 222: The Interplay Among Black Holes: Stars & ISM in Galactic Nuclei March 1-5, 2004, Gramado, Rio Grande do Sul, Brazil

#### Scientific Organizing Committee:

Thaisa Storchi Bergmann (Brazil, Chair), Daniela Calzetti (USA), Françoise Combes (France), Timothy M. Heckman (USA, Co-Chair), Luis C. Ho (USA), F. Duccio Macchetto (USA-ESA), Hagai Netzer (Israel), Miriani G. Pastoriza (Brazil), Linda Tacconi (Germany), Keiichi Wada (Japan), Martin J. Ward (UK) & Andrew S. Wilson (USA).

Local Organizing Committee: Charles Bonatto (Chair).

### Principal Topics:

- Historical perspective: from exotic phenomena in QSOs to ubiquity in nuclei of galaxies;
- Black holes in galactic nuclei: masses, accretion phenomena, nuclear jets, winds and broad-line regions;
- Stars: nuclear starbursts and star clusters, connection with bulge formation, sizes, masses, SFR, winds, stellar populations;
- ISM: gas and dust distributions and properties around AGNs and starbursts;
- Connections: accretion to and feedback from BH, triggering of AGNs and starbursts;
- Connection with galaxy evolution, evolution of bulges and nuclear BHs, cosmological observations and models.

Editors: Th. Storchi Bergmann, L.C. Ho & H.R. Schmitt.

Contact address: Thaisa Storchi Bergmann

Instituto de Fisica, Universidade Federal do Rio Grande do Sul (UFRGS)

Av. Bento Goncalves 9500, CP 15051 / BR-91 501 970 Porto Alegre RS, Brazil

Tel: +55 51 3316 6443 - Fax: +55 51 3316 7286

Email: bhsign@if.ufrgs.br - URL: http://bhsign.if.ufrgs.br/

SPM 223: Multi-Wavelength Investigations of Solar Activity June 14-19, 2004, St. Petersburg, Russian Federation

### Scientific Organizing Committee:

Guoxiang Ai (China), Elena E. Benevolenskaya (Co-Chair, Russian Federation-USA), Roger-Maurice Bonnet (Switzerland), Lidia van Driel-Gesztelyi (France), Bernhard Fleck (The Netherlands), Alexander G. Kosovichev (Ukraine-USA), Alexander V. Stepanov (Co-Chair, Russian Federation), Kazunari Shibata (Japan), David F. Webb (USA) & Valery V. Zaitsev (Russian Federation).

Local Organizing Committee: Alexander V. Stepanov (Chair).

# Principal Topics:

- Solar cycle in the interior, atmosphere and heliosphere;
- Structure and evolution of active regions from the sub-photospheric layers to the corona;
- Formation and instabilities of filaments and prominences and their relationship to the evolution of the global magnetic field;
- Multi-scale chromospheric and coronal structures and their coupling with the photospheric magnetic fields and dynamics;
- Energy transport, storage and release in the solar atmosphere and corona;
- Heliospheric effects of solar activity and space weather forecast.

Editors: A.V. Stepanov, E.E. Benevolenskaya & A.G. Kosovichev.

Contact address: Elena E. Benevolenskaya

Stanford University, 455 Via Palou / US - Stanford, CA 94305, USA

Tel: +1 650 724 4938 - Fax: +1 650 725 2333

Email: ebenevolenskaya@solar.stanford.edu - URL: http://sun.stanford.edu/IAUS223/

#### SPM 224: The A-Star Puzzle

July 8-13, 2004, Poprad, Slovakia

# Scientific Organizing Committee:

Saul J. Adelman (USA), Stefano Bagnulo (ESO, Chile), Luis A. Balona, (South Africa), Corinne Charbonnel (France), Margarida Cunha (Portugal), Francesca D'Antona (Italia), Ivan Hubeny (USA), Friedrich Kupka (UK), Gautier Mathys (ESO, Chili), Georges Michaud (Canada), Arlette Noels (Belgium), Mudumba Parthasarathy (India), Tanya A. Ryabchikova (Russian Federation), Hiromoto Shibahashi (Japan), Christiaan Sterken (Belgium), Gregg A. Wade (Canada), Werner W. Weiss (Co-Chair, Austria) & Juraj Zverko (Co-Chair, Slovakia).

Local Organizing Committee: Jozef Ziznovsky (Chair).

## Principal Topics:

- Convection;
- Diffusion, the primary process for elemental segregation, accretion and stellar winds;
- Magnetic fields;
- Rotation;
- "Normal" A-type stars and chemically peculiar A, Fm and HgMn stars;
- Delta Scuti stars, Lambda Bootis stars and Gamma Doradus stars;
- Pre-main-sequence stars, evolved stars related to A-stars;
- Instrumentation.

Editors: J. Zverko, W.W. Weiss, J. Ziznovsky, & S.J. Adelman.

#### Contact address: Juraj Zverko

Astronomical Inst., Slovak Acad. of Sciences / SK - 059 60 Tatranska Lomnica, Slovakia Tel: +421 52 4467721 - Fax: +421 52 4467656

Email: IAUS224LOC@ta3.sk - URL: http://www.ta3.sk/IAUS224

#### SPM 225: Gravitational Lensing Impact on Cosmology July 19-23, 2004, Lausanne, Switzerland

### Scientific Organizing Committee:

Danielle Alloin (Chile), Roger D. Blandford (USA), Shashikumar M. Chitre (India), Masataka Fukugita (Japan), Nicholas Kaiser (USA), Yannick Mellier (Co-Chair, France), Georges Meylan (Co-Chair, USA), John A. Peacock (UK), Peter Schneider (Germany), Rachel L. Webster (Australia) & Xiang-Ping Wu (China).

Local Organizing Committee: Pierre North (Chair).

# Principal Topics:

- Cosmological parameters  $\Omega,\,\Lambda,\,\sigma_8$  and power spectrum;
- Time delays and Hubble constant;
- QSO-galaxy correlations;
- Redshift surveys of quasars (2dF, SDSS);
- Clusters of galaxies (Chandra, XMM-Newton);
- Sunyaev-Zel'dovich effect;
- Lensing on the CMB;
- Giant arcs and arclets in clusters of galaxies;
- Wide-field imaging and deep spectroscopic surveys (ACS on HST, Megacam at CFHT,

Surpime-Cam at Subaru, Virmos at the VLT, Deimos at KECK, NOAO northern and southern surveys);

- Comparison between X-ray and weak lensing;
- Cosmic shear;
- Galaxy halos;
- Galaxy-galaxy lensing;
- Lensing as a natural telescope;
- Strongly magnified galaxies at high redshifts (CELT, GSMT, TMT, JWST, ALMA, VST, VISTA, SNAP, OWL), lensing at millimeter wavelengths.

Editors: Y. Mellier & G. Meylan.

#### Contact address: Yannick Mellier

Institut d'Astrophysique de Paris, 98 bis boulevard Arago / FR - 75014 Paris, France Tel: +33 1 44 32 81 40/80 00 - Fax: +33 1 44 32 80 01

Email: IAUSymp225@obs.unige.ch - URL: http://obswww.unige.ch/IAUSymp225

#### SPM 226: Coronal & Stellar Mass Ejections Sept. 13-17, 2004, Beijing, China

# Scientific Organizing Committee:

Spiro K. Antiochos (USA), Volker Bothmer (Germany), Jean-Louis Bougeret (France), Andrew Cameron (UK), Hilary Cane (Australia), Ilya Chertok (Russian Federation), Kenneth P. Dere (Co-Chair, USA), Cheng Fang (China), Terry G. Forbes (USA), Richard Harrison (UK), Hugh S. Hudson (USA), Russell A. Howard (USA), Donald V. Reames (USA), Rainer Schwenn (Germany), Kazunari Shibata (Japan), Sami K. Solanki (Germany), Bruce T. Tsurutani (USA), P. Venkatakrishnan (India) & Jingxiu Wang (Co-Chair, China).

Local Organizing Committee: Y.H. Yan (Chair).

### Principal Topics:

- $\hbox{- Source regions (magnetic/coronal structure);}\\$
- Observed properties of CMEs;
- Theoretical models of CMEs;
- Comparisons of theories and observations;
- CMEs in the heliosphere;
- CMEs and energetic particles;
- CMEs and geomagnetic storms;
- Stellar ejecta.

Editors: K.P. Dere & J. Wang.

#### Contact address: Kenneth P. Dere

Code 7663, Naval Research Laboratory / US - Washington, DC 20375 5320, USA

Tel: +1 202 767 2161 - Fax: +1 200 767 5636

Email: dere@halcyon.nrl.navy.mil - cme2004@bao.ac.cn URL: http://srg.bao.ac.cn/IAUS226/index.html

#### 2.2. FUTURE IAU COLLOQUIA

CQM 195: Outskirts of Galaxy Clusters: Intense Life in the Suburbs March 12-16, 2004, Torino, Italia

### Scientific Organizing Committee:

Antonaldo Diaferio (Chair, Italy), Margaret J. Geller (USA), Guinevere Kauffmann (Germany), Tadayuki Kodama (Japan), Diego G. Lambas (Argentina), Andreas Reisenegger (Chile), Eduard Salvador-Solé (Spain), Rien van de Weygaert (The Netherlands) & Howard K.C. Yee (Canada).

Local Organizing Committee: Antonaldo Diaferio (Chair).

#### Principal Topics:

- The cosmic web: super-clustering, interacting clusters, velocity fields; voids; warm and hot intergalactic medium;
- Formation and evolution of galaxy clusters: clusters at low and high redshifts, wide-field imaging and spectroscopy, mass and light estimates, thermal and non-thermal processes in the intra-cluster medium, mass accretion onto clusters; cluster formation modeling;
- Formation and transformation of galaxies: environment-galaxy property connection, galaxy formation modeling.

Editor: Antonaldo Diaferio.

Contact address: Antonaldo Diaferio

Tel: +39 011 6707458 - Fax: +39 011 658444

Email: iauc195@ph.unito.it - URL: http://www.iauc195.to.infn.it/

CQM 196: Transit of Venus: New Views of the Solar System & Galaxy *June 7-11, 2004, Preston, U.K.* 

## Scientific Organizing Committee:

Gordon E. Bromage (Co-Chair, UK), Nicole Capitaine (France), Dale P. Cruikshank (USA), Suzanne Débarbat (France), Steven J. Dick (USA), Michael W. Feast (South Africa), Julieta Fierro (México), Naoteru Gouda (Japan), Donald W. Kurtz (Co-Chair, UK), Anne Lemaitre (Belgium), Mikhail Ya. Marov (Russian Federation), Wayne Orchiston (Australia), Jay M. Pasachoff (USA) & Luisa Pigatto (Italy).

Local Organizing Committee: Gordon E. Bromage (Chair).

# Principal Topics:

- Transits of Venus: their history and science;
- Transits of Mercury;
- Observations of transits of extra-solar planets;
- Modern and historical determinations of the AU;
- Precision measurement of time and rotation of the Earth;
- New discoveries in the solar system;
- Astrophysics from high-precision parallaxes from space and from the ground;
- Hipparcos parallaxes and the Galactic distance scale;
- Scientific promise of future astrometric space missions: Gaia and Jasmine.

Editors: D.W. Kurtz & G.E. Bromage.

Contact address: Donald W. Kurtz

Center for Astrophysics, University of Central Lancashire / GB - Preston, PR1 2HE, UK Tel: +44 1772 89 3735 - Fax: +44 1772 89 2996

Email: tov@uclan.ac.uk - URL: http://www.transit-of-venus.org.uk

CQM 197: Dynamics of Populations of Planetary Systems
Aug. 31-Sept. 4, 2004, Belgrade, Serbia & Montenegro

Scientific Organizing Committee:

Joseph A. Burns (USA), Rudolf Dvorak (Austria), Sylvio Ferraz-Mello (Brazil), Claude Froeschle (France), John D. Hadjidemetriou (Greece), Zoran Knezevic (Co-Chair, Serbia & Montenegro), Anne Lemaitre (Belgium), Andrea Milani (Co-Chair, Italia), Vladimir Porubcan (Slovakia) & Giovanni B. Valsecchi (Italia).

Local Organizing Committee: Ivan Pakvor (Chair).

## Principal Topics:

- Dynamical behavior of entire populations of celestial bodies, observed and simulated;
- The populations: small solar system bodies (asteroids, comets, meteoroid streams, rings and interplanetary dust); artificial objects (space debris); known and hypothetical extra-solar planets; virtual objects representing the uncertain orbit of a newly discovered object;
- Connections with similar problems in stellar dynamics;
- The methods: analytical, semi-analytical and synthetic theories of proper elements, high-performance numerical integration, approximate integrators, advanced computer graphics, including color coded maps and animations.

Editor: Zoran Knezevic.

Contact address: Zoran Knezevic

Astronomical Observatory, Volgina 7 / CS - Belgrade, Serbia & Montenegro

Tel: +381 11 2419 553 - Fax: +381 11 2419 553

Email: zoran@aob.bg.ac.yu - URL: http://www.aob.bg.ac.yu/IAUCol197/

#### 2.3. IAU GENERAL ASSEMBLIES

#### XXVIth IAU General Assembly

Aug. 14-25, 2006, Prague, Czech Republic

Contact address: IAU Secretariat

Tel.: +33 1 43 25 83 58 - Fax: +33 1 43 25 26 16

Email: iau@iap.fr - URL: http://www.astronomy2006.com/index.htm

#### XXVIIth IAU General Assembly

Aug 2-15, 2009, Rio de Janeiro, Brazil Contact address: IAU Secretariat

Tel.: +33 1 43 25 83 58 - Fax: +33 1 43 25 26 16

Email: iau@iap.fr - URL: http://www.iau.org/IAU/News/futmeet.html

# 2.4. NEW IAU PROCEEDINGS SERIES

The Executive Committee of the IAU has decided that its Symposium and Colloquium Proceedings shall become an electronic Proceedings Series, supplemented by paper copies of the same, starting for meetings held in 2004.

It is the aim of the new Symposium and Colloquium Proceedings Series that all papers published in the Proceedings shall be of high scientific quality, and that the Proceedings are published on time, e.g. within six (6) months after the Symposium/Colloquium.

An advisory IAU Editorial Board is established as support body for the Chief-Editors of IAU Symposia and Colloquia Proceedings, who all will be members of the board for their

one year of function. The board will be chaired by the Assistant General Secretary, and its additional members will be the IAU General Secretary and three members appointed by the Executive Committee for a three year period.

One hopes that the new IAU Proceedings Series will be found useful and appreciated by the astronomical community.

#### 3. EXECUTIVE COMMITTEE MATTERS

#### 3.1. WORKING GROUP ON THE STATUS OF WOMEN IN ASTRONOMY

As part of the IAU General Assembly, the Women in Astronomy Meeting (WAM) was held during lunchtime in the spectacular Skyline Terrace on Monday 21 July and was attended by 180 IAU delegates. The main goal of the WAM lunch was to review the status of women in astronomy and to plan strategies and recommend actions to improve the environment for all astronomers.

The event was booked out, showing a very encouraging level of interest in the status of women in astronomy. The meeting was attended by the IAU Executive, including the current President, the President-Elect for the current and the next triennia, several holders of the position of General Secretary and many senior astronomers, including Directors of observatories and Presidents of professional bodies, as well as many students and young astronomers.

The keynote speaker of the working lunch was Dr. Andrea Dupree from the CfA, who reported on the "Women in Astronomy II" meeting held in Pasadena in late June this year (www.aas.org/~cswa/WIA2003.html). Her summary of that meeting reported that women are not represented at highest levels; women do not receive the top honours and prizes; the number of women in astronomy positions is not increasing at a rate commensurate with the availability of qualified female students; that "the playing field must be leveled" in hiring and rewards (as gender bias is alive and well in our society - even if it is unconscious); and that astronomy is challenging, creative, and exciting! The conclusion is that for scientific excellence, we cannot afford to lose the intellectual power of 50% of the gene pool.

All WAM participants received a flyer with a subset of the percentage of women IAU members (www.iau.org/Organization/member/mship\_statist.html), a summary of the 1992 Baltimore Charter (www.stsci.edu/stsci/meetings/WiA/BaltoCharter.html), and seven suggested issues for discussion including career paths and recruitment issues, role models and mentors, childcare and family priorities. Each of the 18 tables had a scribe who took notes during a 40 minute discussion to report back to the meeting in a plenary session. Some of the recurring issues discussed included:

- Data the collection of hard statistics on the status of women in astronomy is essential. While various studies have been conducted in the USA and Europe, there has been no worldwide coordinated collection of data. It is essential that we compile a uniform set of statistics.
- 2. There are some countries (e.g. France, Italy) which have specific programs to provide permanent jobs for young astronomers, particularly women. Other nations could benefit from such schemes.
- 3. Cultural differences exist clearly no one approach works for all situations.
- 4. Role models are vital. Mentoring is extremely important at all career path levels.
- 5. Family support and flexible working conditions are essential.

One of the primary goals of the WAM was to establish an IAU Working Group on the Status of Women in Astronomy. While the number of women studying science at an undergraduate level worldwide continues to rise, work still needs to be done to formulate strategies for action to address the under representation of women in both astronomy and science beyond the student years. A recent study of astronomers in the USA (Urry, Status 2000) shows that women make up 25% of the graduate student population, 15% of the postdoctoral and assistant professor level, and just 5% of the professors within the field of astronomy. Astronomy has a high public appeal and women represent half of society's intellectual capital, yet the average fraction of women with astronomy positions is about 10%, worldwide. Notwithstanding recent efforts to improve the status of women in astronomy (such as the Baltimore Charter), many women astronomers still feel themselves to be at a gender-based disadvantage. Networking has proved to be a very positive resource, but without a formal structure such efforts remain fragmented and too dependent upon individual initiative. An IAU Working Group on the Status of Women in Astronomy will provide visibility, continuity, and the benefits of an official forum, as well as offer a public record of matters and statistics that are at present largely anecdotal. It will act as a federation of Women in national Astronomy organisations, creating links and facilitating information exchanges worldwide.

We were delighted to be able to report that the proposal to establish a Working Group was approved by the IAU Executive a few days prior to the WAM. The aims of the Working Group will be to monitor the status of women in astronomy and recommend future actions that will improve the environment for all astronomers; liaise with committees and Working Groups on women in astronomy that are part of various national societies; be responsible for organising formal Working Group sessions at future IAU General Assemblies; organise international follow-up meetings to the Baltimore and Pasadena Women in Astronomy meetings; ensure that women in non-western countries are well represented in the international community; maintain a list of women who are willing to be on SOCs, serve on peer review panels, and such, as well as provide lists of potential colloquium/conference speakers; and to establish and maintain a comprehensive database of statistics of women in astronomy and coordinate the global collection of such statistics, and work to provide a useful network for women in astronomy.

The IAU Executive have appointed Dr. Anne Green as the Chair of the Working Group. An Executive Committee of the Working Group, which will contain about 15 members, is being established, in which the Executive Committee will include astronomers from a broad geographic and discipline base.

In addition, the Working Group will include a much larger group of participating members, open to all astronomers who are actively working towards improving the status of women in astronomy. This Working Group will be open and inclusive in every way possible and so your input and suggestions are most welcome. A major part of the work will be to identify volunteers in all countries to act as the collectors of statistics on the status of women in astronomy in their country. If you would like to volunteer, or know of someone who might be appropriate (and willing!), please let us know.

We are greatly encouraged by the support and enthusiasm from participants at the WAM lunch and anticipate success with our Working Group objectives. Finally, we would like to thank the Astronomical Society of Australia and the US National Committee for the IAU for their sponsorship of the WAM lunch and the support and contributions of the 36 members of the WAM Working Group who helped prepare the meeting.

Anne Green and Sarah Maddison

#### 3.2. 2009: THE YEAR OF ASTRONOMY

In 1609, Galileo, by using a telescope, was able to recognize that the Earth is not alone in the cosmos and that we are surrounded by many other worlds. This was a fundamental step in the history of Mankind, with the deepest scientific, philosophical and religious implications, opening the way to a new conception of the Universe.

In this framework, the XXVth General Assembly, held in Sydney last July, has voted unanimously a resolution asking that, to coincide with this Anniversary, 2009 be declared by the United Nations "The Year of Astronomy". The same step was adopted a few year ago, at the beginning of the new millennium, when the UN established "2000: The Year of Mathematics". Similarly, the 100th Anniversary of the Theory of Relativity is expected to lead to the "Year of Physics" in 2005.

Following the vote of the General Assembly, the IAU Executive Committee has asked the President, Prof. R. Ekers, to convey to the Italian Government the suggestion that Italy, as the birthcountry of Galileo, should take the lead and present the formal request to UNESCO and to the United Nations, in the appropriate diplomatic procedure. It is expected that many other countries will second this request, once the process has been initiated.

The Executive Committee has also decided, in Sydney, to establish an ad hoc Working Group chaired by the author of this note. Its task is to propose to the Executive Committee and (when appropriate) coordinate a series of worldwide events which, by honoring the discoveries of Galileo, will more generally promote the spread of astronomy and its history, with special emphasis on schools and young people. It is also expected that each country will establish its own national program, appropriate to its traditions, resources and scientific development.

Although 2009 may appear still far away, the organization of such an event (which will coincide with the XXVII IAU General Assembly in Rio de Janeiro), will require many early actions, including the completion of the composition of the ad hoc Working Group with a fair representation of geographic and cultural areas.

An initial Report will probably be ready for the 2004 IAU Executive Committee. Any IAU Individual or National Members with proposal for the Year of Astronomy are invited to submit them (in a concise form) to the following e-mail address: pacini@arcetri.astro.it (subject: "Year of Astronomy").

Franco Pacini, Arcetri Astrophysical Observatory, Firenze, Italy

# 3.3. NEW TERMS OF REFERENCE FOR THE MINOR PLANET CENTER

As one of its decisions during the 77th Meeting, the Executive Committee approved a document containing new Terms of Reference (ToR) for the IAU Minor Planet Center (MPC). Since these ToR form the basis for the contract on the running of the MPC, a necessary consequence is that a new contract be signed based on the new ToR. The Smithsonian Astrophysical Observatory, which currently hosts the MPC, will be asked to negotiate such a contract with the IAU.

One of the crucial aspects of the new ToR is that the MPC will work for the IAU via Division III rather than Commission 20. This is necessary in view of the less permanent status of Commissions, as prescribed by the new IAU Bye-Laws, and it also reflects a wish to pay more attention to the MPC directly by the EC.

Although the current MPC has shown an admirable ability to cope with a quasi-exponentially increasing work load, one must realize that new resources will have to be called upon and new structures of the organization of the work may be required. The new ToR do not attempt to micromanage such a process, but they leave all possibilities open, thereby assigning an important task to the Minor Planet Center Committee, operating under Division III.

Hans Rickmann, Outgoing General Secretary

### 3.4. ADDRESSES OF PRESIDENTS OF EC WORKING GROUPS 2003-2006

```
Future Large Scale Facilities / Les Grands Equipements
   Gerard Gilmore
   Inst of Astronomy
   University of Cambridge
   The Observatories
   Madingley Rd
   GB - Cambridge CB3 0HA
   United Kingdom
   gil@ast.cam.ac.uk
Publishing
   Michelle Storey
   CSIRO / ATNF
   PO Box 76
   AU - Epping NSW 1710
   Australia
   Tel: +61 2 9372 4590 - Fax: +61 2 9372 4310
   Michelle.Storey@atnf.csiro.au
Women in Astronomy / Les Femmes dans l'Astronomie
   Anne Green
   School of Physics A28
   University of Sydney
   AU - Sydney NSW 2006
   Australia
   Tel: +61 2 9351 2727 - Fax: +61 2 9351 7726
   agreen@physics.usyd.edu.au
2009: The Year of Astronomy / 2009: Année Mondiale de l'Astronomie
   Franco Pacini
   Dpt di Astronomia
   Università Degli Studi
   Largo E Fermi 5
   IT - 50125 Firenze
   Italy
   Tel: +39 055 275 21/2232 - Fax: +39 055 220 039
   pacini@arcetri.astro.it
```

### 4. DIVISION MATTERS

#### 4.1. ADDRESSES OF PRESIDENTS 2003-2006

The current composition of the IAU Divisions is listed below. Division Presidents addresses are given on the inside back cover as well as on the IAU Web page. Names and addresses of the new Commission Presidents and Vice-Presidents are given on pp. 18-27.

#### 4.2. COMPOSITION OF THE DIVISIONS

```
Division I: Fundamental Astronomy / Astronomie Fondamentale
```

Commission 4 : Ephemerides

Commission 7 : Celestial Mechanics & Dynamical Astronomy

Commission 8 : Astrometry

Commission 19: Rotation of the Earth

Commission 31: Time

Division II: The Sun & Heliosphere / Soleil & Héliosphère

Commission 10: Solar Activity

Commission 12: Solar Radiation & Structure

Commission 49: Interplanetary Plasma & Heliosphere

Division III: Planetary Systems Sciences / Sciences des Systèmes Planétaires

Commission 15: Physical Study of Comets & Minor Planets

Commission 16: Physical Study of Planets & Satellites Commission 20: Positions & Motions of Minor Planets, Comets & Satellites

Commission 21: Light of the Night Sky

Commission 22 : Meteors, Meteorites & Interplanetary Dust Commission 51 : Bioastronomy: Search for Extraterrestrial Life

Division IV: Stars / Etoiles

Commission 26 : Double & Multiple Stars

Commission 29: Stellar Spectra Commission 35: Stellar Constitution

Commission 36: Theory of Stellar Atmospheres

Commission 45 : Stellar Classification Division V: Variable Stars / Etoiles Variables

Commission 27: Variable Stars Commission 42: Close Binary Stars

Division VI: Interstellar Matter / Matière Interstellaire

Commission 34 : Interstellar Matter

Division VII: Galactic System / Système Galactique

Commission 33: Structure & Dynamics of the Galactic System

Commission 37: Star Clusters & Associations

Division VIII: Galaxies & the Universe / Les Galaxies & l'Univers

Commission 28 : Galaxies Commission 47 : Cosmology

Division IX: Optical & Infrared Techniques / Techniques Optiques & Infrarouges

Commission 9 : Instrumentation & Techniques Commission 25 : Stellar Photometry & Polarimetry

Commission 30 : Radial Velocities

Division X: Radio Astronomy / Radioastronomie

Commission 40 : Radio Astronomy

Division XI: Space & High Energy Astrophysics / Astrophysique Spatiale & des Hautes Energies

Commission 44: Space & High Energy Astrophysics

Division XII: Union-Wide Activities / Activités d'Intérêt Général Commission 5 : Documentation & Astronomical Data

Commission 6 : Astronomical Telegrams Commission 14 : Atomic & Molecular Data Commission 41 : History of Astronomy

Commission 46: Astronomy Education & Development

Commission 50: Protection of Existing & Potential Observatory Sites

### 4.3. NEWS FROM DIVISIONS

Division II: The Sun & Heliosphere (David F. Webb)

Division II includes Commissions 10, 12 and 49.

At the Sydney General Assembly its Working Groups were reorganized. The Working Groups on "Solar Eclipses" chaired by Jay Pasachoff and on "Solar Interplanetary Nomenclature" chaired by Edward Cliver were extended with many thanks for their work in the past three years. The Working Group on "Solar Data Distribution" that was chaired by K. Shibasaki has achieved its main goals and will be terminated. Two new Working Groups were accepted, on "International Data Access" chaired by Robert Bentley and on "International Collaboration on Space" Weather chaired by David Webb.

The Working Group on "Solar Eclipses" has a website: http://www.totalsolareclipse.net to coordinate information for observers for the total solar eclipse of November 23-24, 2003, which will be total only over Antarctica and partial over Australia. The group is also providing information on safe observing of eclipses for future eclipses such as the April 19, 2004 partial eclipse over southern Africa and the October 14, 2004 partial eclipse over Japan, Siberia, Korea, China, Hawaii, and Alaska.

The goal of the "Nomenclature" Working Group is to focus attention on terms used at the forefront of current research in solar heliospheric physics that are thought to be in need of clarification. The Working Group identifies such terms and then commissions a scientist to write an essay that explores the origin of a given term and its alternatives in order to open a discussion and inform the community. The essays are published in Eos, Transactions of the American Geophysical Union for wide dissemination and also posted on internet <a href="http://www.astro.phys.ethz.ch/papers/benz/divII/WG\_Nomenclature.htm">http://www.astro.phys.ethz.ch/papers/benz/divII/WG\_Nomenclature.htm</a>
Essays published to date include the terms used for coronal mass ejections in the solar wind, the terms "gradual" and "impulsive" used to describe solar energetic particle events, and the term "magnetic storm" used to describe solar wind driven disturbances of Earth's magnetic field. A future article will address the various terms used to describe shock waves in the solar atmosphere.

The achievements of the former "Solar Data Distribution" group were:

- 1. publication on the internet of the remaining data in the former Quarterly Bulletin of Solar Activity (QBSA) at http://solar.nro.nao.ac.jp/qbsa/
- 2. an internet listing of solar data available through the internet: List of International Solar Archives (LISA). The page has been kindly put together by Helen Coffee and is at: http://www.ngdc.noaa.gov/stp/SOLAR/IAUWGdoc.html

A new Working Group on "International Data Access" has been formed to take over and expand this effort. It's main task is to coordinate the international efforts being made on virtual solar observatories. It will be chaired by Robert Bentley who has established the membership of the new Working Group. Originally formed as a group intended only to cover the solar part of Division II, the purview of the group has been extended to include the heliosphere to ensure interoperability between data needed to support Space Weather and related studies. Five virtual observatory initiatives from the solar and heliospheric communities are now involved in the group, and we hope this will ensure a healthy exchange of ideas on areas of mutual interest. Initially, discussion will center on data models, description of data resources and coordinate systems. At least one member of the International Virtual Observatory Alliance (IVOA) will participate in this Working Group. An internet page describing the objectives and activities of the Working Group can be found at: http://www.mssl.ucl.ac.uk/grid/iau/DivII\_WG\_IntDataAccess.html

The other new Working Group for "International Collaboration on Space Weather" was formed to coordinate many activities related to space weather from an IAU point of view and at an international level. It is chaired by the new President of Division II, David Webb. At this time it includes the international activities of the International Heliospheric Year chaired by N. Gopalswamy, the International Living with a Star program lead by D. Sibeck, the new Climate and Weather of the Sun-Earth System (CAWSES) subproject on Sources of Geomagnetic Activity chaired by N. Gopalswamy, and a Chinese Space Weather study lead by J-X Wang. An early goal of the Working Group is to help organize an International Heliospheric Year (IHY) in 2007 as initiated by N. Gopalswamy and J. Davila. IHY is aimed at producing scientific results through close international cooperation on observations and data analysis. Its internet site is <a href="http://ihy.gsfc.nasa.gov/">http://ihy.gsfc.nasa.gov/</a>

Two IAU Symposia involving the science of Division II have been accepted and will be held next year. They are: IAU Symposium No. 223 on "Multi-Wavelength Investigations of Solar Activity" June 14-19, 2004 in St. Petersburg, Russian federation, and IAU Symposium No. 226 on "Coronal and Stellar Mass Ejections" September 13-17, 2004 in Beijing, China. More information is to be found in this IB pp. 5-7.

#### Division IV: Stars (Dainis Dravins)

The new Organizing Committee of Div. IV, set up during the Sydney General Assembly, has approved a new Working Group on "Binary and Multiple System Nomenclature" to be set up within Commission 26 (Binary and Multiple Stars).

The need for such a group became apparent following sessions devoted to the topic both at Manchester in 2000, and in Sydney 2003. New techniques, applied from both the ground and from space, are leading to the detection of a significantly increased number of binary and multiple stellar/substellar/planetary systems. The tasks of this Working Group will include identification of means of avoiding conflicting designations for such components, even if discovered with widely different techniques. Hopefully, a set of recommendations will be available in time for the next General Assembly in Prague.

## Division XII: Union-Wide Activities (Virginia L. Trimble)

Division XII, Union-Wide Activities, is the newest member of the IAU family and will perhaps be the last, for who would be brave enough to initiate Division XIII?! It comprises the six commissions that had not previously been part of any Division (5 - Documentation and Astronomical Data; 6 - Astronomical Telegrams; 14 - Atomic and Molecular Data; 41 - History of Astronomy; 46 - Astronomy Education and Development; 50 - Protection of Existing and Potential Observatory Sites) and serves to make the

structure of the IAU somewhat more uniform (though beyond some point this is like trying to put cats into uniforms).

The initial board includes the new Presidents of these six Commissions and a Division President (Virginia Trimble) and Vice-President (Johannes Andersen) appointed by the Executive Committee. One immediate effect was that the views of these Commissions were folded into the process of choosing symposia and colloquia for sponsorship in 2004, because all eight members (or their predecessors or expected successors) were able to meet briefly in Sydney and discuss the proposals, as well as other issues.

As time goes on, we -and you- will undoubtedly have additional ideas about what sorts of things should be Union-Wide Activities and will propose initiatives to make them happen. Please communicate your ideas to us.

One of our ideas came out of a pair of meetings held in the Canary Islands in 2002 and in Washington DC in 2003 on "communicating astronomy to the public". The intention is to establish either the first Working Group directly under the Division or an eighth Program Group (PG) within Commission 46 on this topic. The main thrust is that, because our work is funded by nearly all of our fellow citizens, we all have a responsibility to let them know what they are getting for their money. This means improving communication that goes indirectly through the media, planetariums, museums, science fiction and other modes as well as direct communication in public talks and other "outreach" activities. Thus the prime purpose of the PG or WG will be to make the astronomical community aware of what we need to be doing and how to do it better, and to make leaders like observatory directors and department chairs aware that this is a serious activity which should be considered in promotion and tenure decisions. A document on this is being prepared. Another 2004 workshop on the topic (probably in Europe) is another goal, along with perhaps organizing one or more Joint Discussions or other sorts of sessions for the Prague GA on how we can all - not just public outreach officers - help to fulfill this responsibility. The WG/PG would also have as an immediate responsibilty reminding SOCs of approved and proposed symposia and colloquia that they should take advantage of the presence of distinguished astronomers in the host communities to arrange public talks and otherwise include a public outreach component in their plans.

### 5. COMMISSION MATTERS

#### ADDRESSES OF PRESIDENTS & VICE-PRESIDENTS 2003-2006 5.1.

President Vice-President

Commission 4 **Ephemerides** DΙ **Ephémérides** 

Georgij A. Krasinsky Toshio Fukushima Institute of Applied Astronomy Public Relation Center

NAOJ

Nab Kutuzova 10 2-21-1 Osawa, Mitaka RU – 191187 St Petersburg JP – Tokyo 181-8588

Russian Federation Japan

Tel: +81 42 234 3613 Tel: +7 812 230 7414 Fax: +7 812 230 7413 Fax: +81 42 234 3810 kra@quasar.ipa.nw.ru Toshio.Fukushima@nao.ac.jp

Commission 5 Documentation & Astronomical Data D XII Documentation & Données Astronomiques

Françoise Genova Raymond Norris Observatoire Astronomique CSÍRO / ATNF Université de Strasbourg I PO Box 76

11 r de l'Université AU - Epping NSW 1710

FR - 67000 Strasbourg Australia

Tel: +61 2 9372 4416 France Tel: +33 3 90 24 24 76 Fax: +61 2 9372 4310 Fax: +33 3 90 24 24 32 Ray.Norris@csiro.au

genova@astro.u-strasbg.fr

Commission 6 Astronomical Telegrams D XII Télégrammes Astronomiques

Kaare Aksnes Alan Gilmore

Institute of Theoretical Astrophysics Mount John Observatory University of Oslo Box 56

Box 1029, Blindern NZ - Lake Tekapo 8770 NO - 0315 Oslo New Zealand Norway Tel: +64 3 680 6800

Tel: +47 22 85 65 15 Fax: +64 3 680 6005

Fax: +47 22 85 65 05 kaare.aksnes@astro.uio.no

Commission 7 Celestial Mechanics & Dynamical Astronomy DΙ Mécanique Céleste & Astronomie Dynamique

Joseph Burns Andrea Milani Dpt Matematica Astronomy Dpt Università di Pisa University of Cornell Via Buonarroti 2 328 Space Sc Bldg US - Ithaca NY 14853 6801 IT - 56127 Pisa

Italy USA

Tel: +1 607 255 7186 Fax: +1 607 255 2011 Tel: +39 050 844 254 Fax: +39 050 844 224 Milani@dm.unipi.it jab16@cornell.edu

Commission 8 Astrometry Astrométrie

**Imants Platais** Dpt of Physics & Astronomy

Johns Hopkins University Charles and 34th St

US - Baltimore MD 21218 USA

Tel: +1 410 516 5285 Fax: +1 410 516 5096 imants@pha.jhu.edu

Commission 9 Instrumentation & Techniques D IX Instrumentation & Techniques

Michel Dennefeld Institut d'Astrophysique de Paris

98bis Bd Arago FR - 75014 Paris

France

Tel: +33 1 44 32 80 00 Fax: +33 1 44 32 80 01 dennefel@iap.fr

Martin Cullum

Irina Kumkova

Nab Kutuzova 10

Russian Federation

Tel: +7 812 275 1118

Fax: +7 812 275 1119

RAS

European Southern Observatory Karl-Schwarzschild-str. 2 DE - 85740 Garching

Institute of Applied Astronomy

RU - 191187 St Petersburg

kumkova@quasar.ipa.nw.ru

Germany

Tel: +49 893 200 60 Fax: +49 893 202 362 mcullum@eso.org

Commission 10 Solar Activity Activité Solaire

Donald Melrose School of Physics A28 University of Sydney

AU - Sydney NSW 2006

Australia

Tel: +61 2 9351 4234 Fax: +61 2 9351 7726 melrose@physics.usyd.edu.au James Klimchuk

Naval Research Laboratory

Code 7675JAK

US - Washington DC 20375 5352

USA

Tel: +1 202 404 8136 Fax: +1 202 404 7997 james.klimchuk@nrl.navy.mil

Commission 12 Solar Radiation & Structure DΙΙ Radiation & Structure Solaires

Thomas Bogdan Advanced Study Program Ntl Cntr for Atmospheric Research

P.O. Box 3000 4201 Wilson Blvd

US - Boulder CO 80307 3000

USA

Tel: +1 303 497 1547

Fax:

tom@ucar.edu

Valentin Martinez Pillet Inst de Astrofísica de Canarias C/ vía Láctea s/n

ES - 38200 La Laguna (Tenerife)

Spain

Tel: +34 92 260 5237 Fax: +34 92 260 5210 vmp@ll.iac.es

Commission 14 Atomic & Molecular Data

D XII Données Atomiques & Moléculaires

Sveneric Johansson Steven Federman **Lund Observatory Dpt Physics & Astronomy** Lund University University of Toledo Box 43 2801 W Bancroft St SE - 221 00 Lund US - Toledo OH 43606

Sweden USA

Tel: +46 46 22 21583 Tel: +1 419 530 2652 Fax: +46 46 22 24614 Fax: +1 419 530 2723 Sveneric.Johansson@astro.lu.se sfederm@uoft02.utoledo.edu

Physical Study of Comets & Minor Planets Commission 15 D III Etude Physique des Comètes & des Petites Planètes

Edward Tedesco Walter Huebner Space Science Center Southwest Research Inst University of New Hampshire PO Drawer 28510

US - San Antonio TX 78228 0510 39 College Road, Morse Hall 315

US - Durham NH 03824 USA

USA Tel: +1 210 522 2730 Tel: +1 603 397 5282 Fax: +1 210 543 0052 Fax: +1 603 397 5283 whuebner@swri.edu

Ed.Tedesco@unh.edu

Physical Study of Planets & Satellites Commission 16 Etude Physique des Planètes & des Satellites D III

Guy Consolmagno Régis Courtin

LESIA Steward Observ (Vatican Observ.) University of Arizona Observatoire Paris-Meudon

US - Tucson AZ 85721 5 Pl J. Janssen

USA FR - 92195 Meudon PPL Cdx

Tel: +1 520 795 9866 France

Fax: +1 520 326 0756 Tel: +33 1 45 07 77 29 gjc@as.arizona.edu Fax: +33 1 45 34 79 83 Regis.Courtin@obspm.fr

Commission 19 Rotation of the Earth Rotation de la Terre

Véronique Dehant Royal Observatory of Belgium

3 Áv Circulaire BE - 1180 Brussels

Belgium

Tel: +32 2 373 02 66 Fax: +32 2 374 98 22

Veronique.Dehant@oma.be

Aleksander Brzezinski Space Research Center Polish Academy of Sciences Ul Bartycka 18 A PL - 00 716 Warsaw Poland

Tel: +48 22 40 3766 Fax: +48 22 36 8961 alek@cbk.waw.pl

Positions & Motions of Minor Planets, Comets & Satellites Commission 20 Positions & Mouvements des Petites Planètes, Comètes & Satellites

Julio Fernandez Giovanni Valsecchi CNR Tor Vergata Dpt de Astronomia Facultad de Ciencias **IASF** Igua 4225

Via Fosso del Cavaliere 100

IT - 00133 Roma

Italy

Tel: +39 06 499 34446 Fax: +39 06 206 60188 giovanni@rm.iasf.cnr.it

Uruguay Tel: +598 2 419 087/089 Fax: +598 2 409 973 fernandez@fisica.edu.uy

UY - Montevideo 11400

Light of the Night Sky Commission 21 D III Lumière du Ciel Nocturne

Bo Gustafson Adolf Witt

Astronomy Dpt/Lab f Astrophysics

University of Florida 211 SSRB

US - Gainesville FL 32611 2055

USA

Tel: +1 352 392 2052\*216 Fax: +1 352 392 5089 gustaf@astro.ufl.edu

**Dpt Physics & Astronomy** University of Toledo 2801 W Bancroft St US - Toledo OH 43606

USA

Tel: +1 419 530 2709 Fax: +1 419 530 2723 awitt@dusty.astro.utoledo.edu

Meteors, Meteorites & Interplanetary Dust Commission 22 Météores, Météorites & Poussière interplanétaire D III

Ingrid Mann Pavel Spurny

Institut für Planetologie Astronomical Institute Universität Wilhelm Czech Academy of Sciences

Box 299 Fricova 298

Klemm - Str. 10 CZ - 251 65 Ondrejov

DE - 48149 Muenster Czech Rep

Tel: +420 323 620 153 Germany Tel: +49 251 833 9081 Fax: +420 323 620 117

Fax: +49 251 833 6301 imann@uni-muenster.de

Commission 25 Stellar Photometry & Polarimetry D IX Photométrie & Polarimétrie Stellaires

Arlo Landolt Peter Martinez **Dpt Physics & Astronomy** SAAO Louisiana State University Box 9

US - Baton Rouge LA 70803 4001

USA

Tel: +1 225 578 1160 Fax: +1 225 578 7001 landolt@rouge.phys.lsu.edu

202 Nicholson Hall

spurny@asu.cas.cz

ZA - 7935 Observatory South Africa

Tel: +27 23 571 1205 Fax: +27 23 571 1413 peter@saao.ac.za

Commission 26 Double & Multiple Stars D IV Etoiles Doubles & Multiples

William Hartkopf Astrometry Dpt **USNO** 

3450 Massachusetts Av NW US - Washington DC 20392 5420

USA

Tel: +1 202 762 1478 Fax: +1 202 762 1516 wih@usno.navy.mil

Commission 27 Variable Stars Etoiles Variables

Conny Aerts Inst v Sterrenkunde Katholieke Universiteit Leuven Celestijnenlaan 200 B

BE - 3001 Leuven Belgium

Tel: +32 1 632 70 28 Fax: +32 1 632 79 99

Conny.Aerts@ster.kuleuven.ac.be

Commission 28 Galaxies D VIII Galaxies

Elaine Sadler School of Physics A28 University of Sydney AU - Sydney NSW 2006

Australia

Tel: +61 2 9351 2622 Fax: +61 2 9351 7726 ems@physics.usyd.edu.au

Commission 29 Stellar Spectra D IV Spectres Stellaires

Chris Sneden **Dpt of Astronomy** University of Texas at Austin

MC 1400

US - Austin TX 78712 1083 USA

Tel: +1 512 471 1349 Fax: +1 512 471 6016 chris@astro.as.utexas.edu Christine Allen Instituto de Astronomía

UNAM

Apt Postal 70 264 MX - México DF 04510

México

Tel: +52 55 5622 3901 Fax: +52 55 5616 0653 chris@astroscu.unam.mx

Steven Kawaler **Dpt Physics & Astronomy** Iowa State University US - Ames IA 50011 3160 USA

Tel: +1 515 294 9728 Fax: +1 515 294 6027 sdk@iastate.edu

Françoise Combes LERMA Observatoire de Paris 61 av Observatoire FR - 75014 Paris

France

Tel: +33 1 40 51 20 77 Fax: +33 1 40 51 20 02 francoise.combes@obspm.fr

Mudumba Parthasarathy Indian Institute of Astrophysics Koramangala Sarjapur Rd IN - Bangalore 560 034

Tel: +91 80 356 6585/6497 Fax: +91 80 553 4043

Commission 30 Radial Velocities Vitesses Radiales D IX

Birgitta Nordström Niels Bohr Institute Copenhagen University Blegdamsvej 17 DK - 2100 Copenhagen

Denmark

Tel: +45 35 32 54 20 Fax: +45 35 32 52 17 birgitta@astro.ku.dk

Commission 31 Time L'Heure

Demetrios Matsakis

USNO

3450 Massachusetts Av NW US - Washington DC 20392 5420

USA

Tel: +1 202 653 0585 Fax: +1 202 653 0587 dnm@orion.usno.navy.mil

Stephane Udry Observatoire de Genève 51 Chemin des Maillettes CH - 1290 Sauverny Switzerland

Tel: +41 22 755 26 11 Fax: +41 22 755 39 83 stephane.udry@obs.unige.ch

Pascale Defraigne Royal Observatory Belgium 3 Av Circulaire BE - 1180 Brussels

Belgium

Tel: +32 2 373 02 60 Fax: +32 2 374 98 22 Pascale.Defraigne@oma.be

Structure & Dynamics of the Galactic System Commission 33 Structure & Dynamique du Système Galactique D VII

Patricia Whitelock

SAAO PO Box 9

ZA - 7935 Observatory

South Africa

Tel: +27 21 460 9318 Fax: +27 21 447 3639 paw@saao.ac.za

Gerhard Ortwin Astronomical Institute University of Basel Venusstr 7

CH - 4102 Binningen

Switzerland

Tel: +41 61 205 54 19/454 Fax: +41 61 205 54 55 gerhard@astro.unibas.ch

Commission 34 Interstellar Matter Matière Interstellaire

John Dyson

**Dpt Physics & Astronomy** University of Leeds GB - Leeds LS2 9JT United Kingdom Tel: +44 113 343 3869 Fax: +44 113 343 3869 jed@ast.leeds.ac.uk

Thomas Millar **Dpt of Pysics** UMIST Box 88

GB- Manchester M60 1QD United Kingdom Tel: +44 161 200 3677 Fax: +44 161 200 3669 Tom.Millar@umist.ac.uk

Commission 35 Stellar Constitution
D IV Constitution des Etoiles

Wojciech Dziembowski Francesca D'Antona

Astronomical Observatory Osservatorio Astronomico di Roma

Warsaw University Via d osservatorio 5

Al Ujazdowskie 4 IT - 00040 Monte Porzio Catone

PL - 00 478 Warsaw Italy

Poland Tel: +39 06 942 86447 Tel: +48 22 629 4011\*108 Fax: +39 06 9447 243 Fax: +48 22 629 4967 dantona@mporzio.astro.it

wd@astrouw.edu.pl

Commission 36 Theory of Stellar Atmospheres
D IV Théorie des Atmosphères Stellaires

Monique Spite John Landstreet

GEPI Dpt Physics & Astronomy
Observatoire Paris-Meudon University of Western Ontario
5 Pl J. Janssen CA - London ON, N6A 3K7

FR - 92195 Meudon PPL Cdx Canada

France Tel: +1 519 661 2211
Tel: +33 1 45 07 78 39 Fax: +1 519 661 2033
Fax: +33 1 45 07 78 78 jlandstr@uwo.ca

monique.spite@obspm.fr

Commission 37 Star Clusters & Associations D VII Amas Stellaires & Associations

Ata Sarajedini Rainer Spurzem

Astronomy Dpt ARI

University of Florida Moenchhstr 12 14 211 SSRB DE - 69120 Heidelberg

US - Gainesville FL 32611 2055 Germany

USA Tel: +49 622 140 5230
Tel: +1 352 392 2055 Fax: +49 622 140 5297
Fax: +1 352 392 5089 spurzem@ari.uni-heidelberg.de

ata@astro.ufl.edu

Commission 40 Radio Astronomy D X Radioastronomie

Luis Rodriguez Ren-Dong Nan

Instituto de Astronomía Ntl Astronomical Observatories UNAM Chinese Academy of Sciences

Unidad Morelia A20 Datun Rd
Apt Postal 72 3 Xangari Chaoyang District
MX - Morelia, Michoacan 58089 CN - Beijing 100012

México China PR

Tel: +52 443 322 2742 Tel: +86 10 6487 7280 Fax: +52 443 322 2726 Fax: +86 10 6485 2055

l.rodriguez@astrosmo.unam.mx nrd@bao.ac.cn

Commission 41 History of Astronomy
D XII Histoire de l'Astronomie

Alexander Gurshtein

1818 N. 20th Street US - Grand Junction CO 81501

USA

Tel: +1 970 241 2876 Fax: +1 970 256 1753

agurshtein@hotmail.com

Commission 42 Close Binary Stars D V Etoiles Binaires Serrées

Alvaro Gimenez

ESA

Apt 50727 Villafranca ES - 28040 Madrid

Spain

Tel: +34 91 813 1155

Fax: +34 91 813 1139

agimenez@rssd.esa.int

Slavek Rucinski

Il-Seong Nha

Yonsei University 134 Sinchon-dong

KR - Seoul 120 449

Tel: +82 3 922 0131 Fax: +82 2 365 0937 slisnha@chollian.net

Seodaemun-ku

Korea RP

Dpt of Astronomy & Space Sciences

David Dunlap Observatory

University of Toronto

Box 360 60 St George St

CA - Toronto ON, L4C 4Y6

Canada

Tel: +1 905 884 9562 Fax: +1 905 884 2672 rucinski@astro.utoronto.ca

Commission 44 Space & High Energy Astrophysics D XI Astrophysique Spatiale & des Hautes Energies

Haruyuki Okuda

Gunma Astronomical Observatory

Takayama mura Agatsuma-gun

JP - Gunma-ken 377 0702

Japan

Tel: +81 279 70 5300 Fax: +81 279 70 5544 okuda@agate.plala.or.jp Günther Hasinger

AIP

Potsdam Universitäts An der Sternwarte 16 DE - 14482 Potsdam

Germany

Tel: +49 331 749 9381 Fax: +49 331 749 9267 ghasinger@aip.de

Commission 45 Stellar Classification
D IV Classification Stellaire

Christopher Corbally

Steward Observ (Vatican Observ)

University of Arizona 933 N Cherry Av

US - Tucson AZ 85721 0065

USA

Tel: +1 520 621 3225 Fax: +1 520 621 1532 ccorbally@as.arizona.edu Sunetra Giridhar

Indian Institute of Astrophysics

Koramangala Sarjapur Rd

IN - Bangalore 560 034

India

Tel: +91 80 356 6585 Fax: +91 80 553 4043 giridhar@iiap.ernet.in

Commission 46 Astronomical Education & Development D XII Education & Développement en Astronomie

Jay Pasachoff Barrie Jones Hopkins Observatory Physics Dpt Williams College Open University 33 Lab Campus Dr Walton Hall

US - Williamstown MA 01267 GB - Milton Keynes MK7 6AA

USA United Kingdom Tel: +1 413 597 2105 Tel: +44 190 865 3378 Fax: +1 413 597 3200 Fax: +44 190 865 3744 pasachoff@williams.edu B.W.Jones@ope n.ac.uk

Commission 47 Cosmology D VIII Cosmologie

Simon Lilly Rachel Webster Dpt of Physics School of Physics ETH Hönggerberg University of Melbourne HPF G4.1 AU - Parkville VIC 3010

CH - 8093 Zürich Australia

Tel: +61 3 8344 5450 Switzerland Tel: +41 1 633 38 28/25 53 Fax: +61 3 9347 4783

Fax: +41 1 633 12 38 rwebster@physics.unimelb.edu.au

simon.lilly@phys.ethz.ch

Interplanetary Plasma & Heliosphere Commission 49 DII Plasma Interplanétaire & Héliosphère

David Webb Jean-Louis Bougeret

Space Vehicles Directorate/VSBS LESIA

Boston College & AFRL Observatoire Paris-Meudon

29 Randolph Rd 5 Pl J. Janssen

US - Hanscom AFB MA 01731 3010 FR - 92195 Meudon PPL Cdx

USA France

Tel: +33 1 45 07 77 04 Tel: +1 617 377 3970/3086 Fax: +1 617 377 3160 Fax: +33 1 45 07 28 06 david.webb@hanscom.af.mil Jean-Louis.Bougeret@obspm.fr

Protection of Existing & Potential Observatory Sites Commission 50 Protection des Sites d'Observatoires Existants & Potentiels D XII

Malcolm Smith Michelle Storey CSIRO / ATNÉ CTIO NOAO PO Box 76

Casilla 603 AU - Epping NSW 1710

CL - La Serena Australia

Tel: +61 2 9372 4590 Chile Tel: +56 51 20 5217 Fax: +61 2 9372 4310 Fax: +56 51 20 5212 Michelle.Storey@atnf.csiro.au

msmith@ctio.noao.edu

Commission 51 Bioastronomy: Search for Extraterrestrial Life D III Bioastronomie: Recherche de la Vie Extraterrestre

Karen Meech Institute for Astronomy University of Hawaii, Honolulu 2680 Woodlawn Dr US - Honolulu HI 96822 USA

Tel: +1 808 956 6828 Fax: +1 808 956 9580 meech@ifa.hawaii.edu

#### 5.2. COMMISSION REPORTS

### Commission 46: Astronomy Education & Development

The IAU's Commission on Astronomy Education and Development has been the only commission with representatives from each member country. Since the commissions on education and on astronomy in developing countries were combined in 2000, we have had a series of National Liaisons who report on education activities in their countries and who can take back to their countries the discussions and suggestions of others.

We have a Web site, including back issues of our newsletter and contact information for our National Liaisons, at:

http://www.astronomyeducation.org and at http://physics.open.ac.uk/IAU46

We operate as a series of Program Groups. They include:

Worldwide Development of Astronomy (WWDA)

John Hearnshaw (New Zealand), Chair

An aim of the Worldwide Development of Astronomy Program Group is to identify non-IAU countries for a visit. These countries would be those that would welcome some development of their capabilities in teaching and/or research in astronomy. Such visits are to be followed by a report on whether the country is suitable for our Program Group on Teaching Astronomy for Development. A longer term goal could be to explore the possibilities of setting up a third-world institute for astronomy in a developing country, or to have a number of nodes of such an institute distributed through several geographical locations.

Teaching for Astronomy Development (TAD)

Jay White (USA), Chair; Donat Wentzel (USA), Vice-Chair

Teaching for Astronomy Development assists countries with little existing astronomy to enhance their infrastructure for astronomy education as well as research at the tertiary level. The TADs assist with the creation of university level astronomy courses, provide equipment and expertise for educationally based research programs, provide travel funds for graduate students, scientists and foreign "experts", and provide general support for science education. During the 2000-2003 triennium, they worked especially in Central America, Vietnam, Morocco, Philippines, and Nigeria. See also § 10.1. TAD yearly report pp. 44-45.

International Schools for Young Astronomers (ISYAs)

Michèle Gerbaldi (France), Chair; Edward Guinan (USA), Vice-Chair

The International Schools for Young Astronomers (ISYAs) have been a very successful project of the Commission. Each ISYA involves dozens of young post-graduates at the MSc level and above. Each has both lectures and practical work. Also, these schools are often the first opportunity students had of addressing their peers and others in English,

which was frequently not their mother tongue. The schools also offer the opportunity to develop networks between students and their teachers/supervisors. In the last triennium, there have been schools at Chiang Mai, Thailand, during January 3-22, 2001, and San Juan, Argentina, during August 12-30, 2002. Future schools are proposed for al Akhawayn University, Ifrane, Morocco, in 2004, and Puebla, México, in 2005.

#### Exchange of Astronomers

Charles Tolbert (USA), Chair; John Percy (Canada), Vice-Chair

The Exchange of Astronomers Program Group awards airfare to and/or from host institutions for visits of at least three months. Local subsistence expenses are covered by the hosts. Countries from which participants originated included India, Korea, Nigeria, Egypt, San Salvador, Argentina, Russian Federation, Australia, and others. Host countries included China, USA, México, Canada, India in addition to several European countries.

#### Collaborative Group

Syuzo Isobe (Japan), Chair

The Collaborative Group Program Group works with both the OECD Global Science Forum (the OECD, Organisation for Economic Co-operation and Development, is an international organization based in Paris) and a United Nations Conference on the Exploration and Peaceful Uses of Outer Space, UNISPACE III (sponsored by the United Nations Office for Outer Space Affairs).

#### Newsletter

Barrie Jones (UK), Chair

The Commission publishes two newsletters per year. They are available on the Commission's Website and are sent out to others. The newsletters include a variety of education-related material, including triennial reports of member countries and reports on relevant meetings.

## National Liaisons

the Vice-President, ex officio

National Liaisons exist for most countries that adhere to the IAU plus a handful of regional organizations, such as that for Central America. Interested readers are invited to contact their National Liaison to set up a channel of interchange, or to contact the Commission with any suggestions for improved contact in their countries.

# Public Education at the Times of Solar Eclipses

Jay Pasachoff (USA), Chair

In the days before a solar eclipse, a country's attention is often on the eclipse, so there is a rare opportunity to exploit the media to promote astronomy and to use these events for educational purposes. It is also useful for the IAU through its Program Group on Public Education at the Times of Eclipses to raise the awareness levels of the need for safe viewing of eclipses. There is now a website: http://www.eclipses.info that contains or links to information relating to eclipses. This Program Group is also active in trying to coordinate educational activities relevant to the 8 June 2004 transit of Venus, the first such transit visible since 1882. Its Web site at http://www.transitofvenus.info has information and links about the transit.

# Exchange of Books & Journals

with a new chair to be chosen

Several organizations provide free books and journals to astronomically-developing countries. Where possible, the recipient countries are selected as those being involved in programs such as Teaching for Astronomy Development meets local needs. We are discussing how to respond to the widespread change from paper journals to electronic access.

During the General Assembly, we sponsored a special session on "Effective Teaching and Learning of Astronomy". A resulting book is to be published by Cambridge University Press.

We were very pleased that a formal Resolution on the value of education in astronomy was passed at the closing session of the General Assembly. It is available on our Website. We hope it is useful for countries trying to improve astronomy education in their country to have this formal statement from the IAU. We are glad to mail it directly to national officials on request.

It has become a tradition that there be a teachers' workshop held in connection with the IAU General Assemblies. Such an event was held for local teachers at the Powerhouse Museum, a museum of science and technology, in Sydney, just after the General Assembly. We welcome volunteers to work on the Prague event.

Subsequent to the General Assembly, at a meeting on "Communicating Astronomy to the Public" held in Washington, the suggestion was made that either a Working Group within Division XII or a Program Group within the Commission be formed to deal with Public Outreach. Since most commission members consider public outreach to be a form of education, we hope that in the current IAU structure the organization can be a Program Group.

Jay M. Pasachoff, President, jay.m.pasachoff@williams.edu

### 6. MEETINGS OF THE EXECUTIVE COMMITTEE

# 6.1. 77th MEETING OF THE IAU EXECUTIVE COMMITTEE July 13, 14,15 & 24, 2003, Sydney, Australia

The 77th Meeting of the Executive Committee (EC) was held on July 13, 14, 15 and on July 24, at the venue of the GA XXV at the Sydney Conference and Exhibition Center in Darling Harbor, Sydney. All members of the EC were present with the exception of Robert Kraft and Kenneth Pounds. In attendance were also the proposed new Assistant General Secretary Karel van der Hucht, the IAU Division Presidents, and the Executive Assistant Monique Léger-Orine. The meeting was chaired by the IAU President, Franco Pacini.

The financial affairs of the Union were reviewed with basis in the report prepared by the IAU Financial Sub-Committee. Concern was expressed about adverse effects caused by very late payment of membership dues by some National Members. The draft budget for 2004-2006 was reviewed and later recommended at the second session of the GA.

At the previous GA, the EC decided, in consultation with the National Members, that a thorough revision of the IAU Statutes and Bye-Laws should be made, with the primary aim to promote initiative, flexibility, and speed of action. The new Statutes and Bye-Laws, based on further consultations with National Members, were reviewed in preparation for their submission to the GA. At the occasion of all Division Presidents in attendance, one also reviewed implications and benefits of the new Statutes and Bye-Laws to the IAU Divisions and their associated Commissions.

The EC decided to recommend to the GA that Nigeria, Serbia & Montenegro, Rumania and Tadjikistan be admitted as full members of the Union. One noted with regret the unavoidable termination of the CAAA's membership in the Union. The EC was on the other hand very pleased to record India's decision to step up one membership category.

A Cosmology Prize is awarded annually by the Peter Gruber Foundation (PFG) following

advice from a Board nominated by the International Astronomical Union and other scientific unions. With funding from the PGF, the IAU also awards two fellowships every three years. Consultations with the PGF raise anticipations of further development and strengthening of the two programmes.

A number of IAU Commissions had till this EC meeting not been assigned to any Division, either because they are multi-disciplinary or they do not have a natural place within existing Divisions. The EC therefore decided to establish a Division XII for "Union-Wide Activities" which currently will comprise Commissions 5, 6, 14, 41, 46 and 50.

The Executive Committee reviewed and discussed the invitations for the IAU General Assembly in 2009 and decided to recommend to the General Assembly to accept the invitation from Brazil to host GA XXII in Rio de Janeiro, Brazil.

# 6.2. 78th MEETING OF THE IAU EXECUTIVE COMMITTEE July 25 & 26, 2003, Sydney, Australia

The 78th meeting of the EC was held at the venue of the GA in Sydney on July 25-26, 2003. All members of the newly elected EC were in attendance (see inside cover page) with the exception of Catherine J. Cesarsky and Kenneth A. Pounds who were both unable to attend. The IAU Executive Assistant, Monique Léger-Orine, attended the meeting. In addition, a number of Division Presidents were present. The meeting was chaired by the new IAU President, Ron Ekers.

The President welcomed the new Division Presidents and gave an organizational overview and addressed the Division Presidents important role and tasks in the organization. The NOC Executive gave a preliminary report from GA XXV. The SOC Chairs of the Symposia held at GA XXV presented their views on the organization of the science programme. The EC received furthermore a brief report on preparation of the General Assembly XXVI in Prague in 2006. The former Chair of the Finance Sub-Committee, Toshio Fukushima, presented an overview of the general financial situation and budget projections of the IAU.

A major agenda item was the selection of IAU sponsored scientific meetings in 2004. Based on evaluation and rankings made by the IAU Division Presidents, the EC decided to offer IAU support to five Symposia and to three Colloquia in 2004.

The contract with the current IAU Publisher expires end of 2003, and the EC resolved that a new publishing strategy and contract should give high priority to electronic publishing, supplemented by a paper version, which should include Proceedings from both Symposia and Colloquia of the IAU. A Call-for-Tender of the new IAU Proceedings Series would be issued in September 2003, with the aim to have the new contract in place by January 2004.

With the Division Presidents in attendance, the IAU President invited to a discussion on future strategies of the IAU. Issues of concern were such as whether the IAU in the future should concentrate on Symposia rather than on the smaller Colloquia, which anyway are supported in abundance by other organizations and institutions, and one discussed how the IAU can become more relevant and attractive to young astronomers.

Other matters included the endorsement of Terms of Reference for the IAU Minor Planet Center aimed at securing a firm basis for this important activity of the IAU. The EC resolved furthermore that the Working Rules of the IAU should be harmonized with the new Statutes and Bye-Laws before the end of the year.

# 6.3. 79th MEETING OF THE IAU EXECUTIVE COMMITTEE May 24-26, 2004, México City, México

The 79th Meeting of the EC will take place on 24-26 May, 2004, in México City, México, at the invitation of Silvia Torres-Peimbert, member of the EC. A major item on the agenda will be the selection of IAU sponsored meetings in 2005. Any matters to be placed on the agenda should reach the General Secretary before March 15, 2004.

### 7. XXVth GENERAL ASSEMBLY

#### 7.1. REPORT ON THE XXVth GENERAL ASSEMBLY

The XXVth General Assembly of the IAU was held at the Sydney Convention Center, in Sydney, Australia, from July 13 to 26, 2003, at the invitation of The National Committee for Astronomy of the Australia Academy of Science and the Astronomical Society of Australia. Very close to 2000 participants from 59 countries took part in the scientific programme. Very many of the attendees and their guests enjoyed fascinating excursions to local attractions, including bus and boat tours in and around Sydney itself, as well as "bushwalks" in the Blue Mountain, in Kuringai National Parks, and wine sampling in beautiful Hunter Valley. Also bigger bus tours to some of the main astronomy observatories in Australia were arranged for delegates and their companies. The Local Organizing Committee was smoothly and successfully led by Harry Hyland, John Whiteoak, Dick Manchester and Rachel Webster.

The opening session took place July 15 in the impressive Sydney Opera House. The inaugural speeches were given by the Honorable MP Dr. Brendan Nelson, Federal Minister for Education, Science and Training, by Co-Chair of NOC, Harry Hyland and by the IAU President, Franco Pacini. Administrative matters included reports by the Executive Committee 2000-2003 and by the Special Nominating Committee. A rich scientific programme was offered during the two weeks which included 6 Symposia, 21 Joint Discussions and 4 Special Sessions, in addition to a number of Division, Commission and Working Group meetings that also included science and necessary business. The three Invited Discourses were given by S. Kulkarni (Gamma-Ray Bursts), K. Freeman (The Formation of our Galaxy), and E. van Dishoeck (From Molecules to Planets, A Milky Way Dreaming). A number of well-received Public Lectures on Astronomy were also given.

Proceedings of the six IAU Symposia will be published in the regular Symposium Series. Condensed proceedings of the Invited Discourses, Joint Discussions and Special Sessions will be published in the Highlights of Astronomy, Vol 13. These volumes, and Transactions XXVB, will all be published by the Astronomical Society of the Pacific.

At the second session of the General Assembly, on July 24, the admission of 894 new Individual Members was announced, bringing the total IAU membership to 9114. The proposed budget for 2003-2006 was approved and the new officers and a new Executive Committee, as listed on the inside cover of this Information Bulletin, were elected. An invitation to hold the XXVIIth General Assembly in Rio de Janeiro, Brazil, in 2009, was accepted.

The Resolutions adopted by the General Assembly are reproduced in the next section of this IB and will also be published in the Proceedings of the General Assembly (Transactions XXVB) together with the new Statutes, Bye-Laws and Working Rules, full records of the other administrative business conducted in Sydney, and the administrative and financial reports for the triennium 2000-2003.

#### 7.2. REVISIONS OF IAU NEW STATUTES & BYE-LAWS

A User's Guide to the New IAU Statutes and Bye-Laws Johannes Andersen, Hans Rickman, and Oddbjørn Engvold (IAU General Secretaries 1997-2006)

The General Assembly (GA) in Sydney approved the most profound revision of the IAU Statutes and Bye-Laws in many years. Why was this undertaken? What changes were made? What will they mean for the daily life of the IAU? We outline here the main points of the revision, their implications, and how they will be implemented, leaving interested astro-lawyers to check the details in the actual texts, e.g. at the IAU web site.

#### Why make changes again?

The Statutes and Bye-Laws have seen extensive and frequent incremental revisions over the years - not rarely legalising actions after the fact. The resulting texts had three main problems:

- (i) In structure and spirit, they still reflected the post-WWI diplomacy that created the IAU, but not the realities of the 21st century.
- (ii) Despite the strict hierarchy of Statutes, Bye-Laws (both voted by the GA), and Working Rules (adopted by the Executive Committee), little logic remained in the distribution of matters between them. Addressing a specific issue consistently was difficult at best, and
- (iii) the underlying philosophy was to control rather than promote action, threatening to make the IAU a backwater in today's fast-moving scientific world.

Consultations with the national representatives at the 2000 GA led the Executive Committee (EC) to decide that a thorough revision should be made, the primary aim being to promote initiative, flexibility, and speed of action. The Statutes should contain basic definitions, broadly phrased so as to not require for frequent revision. The Bye-Laws should clarify the processes by which the provisions of the Statutes are implemented, notably the financial and administrative business of the GA, EC, and Officers. Finally, the Working Rules describe how to conduct our affairs in practice and should be easy to adjust (just think of the explosion of Internet services!).

The new texts have been developed from these principles, in close consultation between the EC, the Division Presidents and the National Members. Using them will be much easier than before. There now remains for the EC to revise the Working Rules in line with the new Statutes and Bye-Laws and define a few rules that have previously been left to memory and tradition.

# Relations to national communities

Veterans may be shocked to learn that "countries" can no longer adhere to the IAU. In fact, as pointed out by our legal adviser, the previous situation was absurd: Nations as such can only be represented by their legally constituted governments and therefore logically cannot be members of non-governmental organisations like the IAU. In analogy with our "parent" union ICSU - The International Council for Science - the term "Adhering Country" has been replaced by "National Member" to designate the national organisations formerly called "Adhering Bodies".

The definition of National Member has also been made more flexible. The previous rules reflected a time when states regarded science as an important, but potentially dangerous strategic asset, to be strictly controlled by government agencies - typically, prestigious Academies of Science funded to implement national science policies. Those policies are yielding to a "user pays" attitude to the scientific unions. Our rules must allow national communities to be represented most effectively in the IAU, depending on their own

circumstances, and National Members can now also be national astronomical societies, universities, etc. Little change will be noticed in practice.

The rigid rule that national membership is lost after 5 years of arrears has also proved outdated. Financial problems are a reality in many countries; the IAU can do little about them; and expelling a country is often a barrier rather than an incentive to finding a mutually beneficial solution. After all, the IAU exists to help our colleagues! The EC may now recommend to the GA to end the adherence of a National Member with large arrears, but flexibility is allowed. Similarly, Associate Members become regular Members with interim status, voting normally on all other issues than the budget.

The key role of the Individual Members is the distinguishing feature and backbone of the IAU. This remains so, but the EC will review the membership criteria to ease access for young astronomers and perhaps also include the somewhat diffuse category of Consultants, who now participate in our work without being "real" members.

#### Internal structure

The cumbersome rules for creating Commissions, controlling their membership, etc., had become the main obstacle to an effective role for the IAU across astronomy. In several booming scientific fields our Commission structure is outdated or non-existing. The Divisions were formed in 1994 to create environments within which a more effective organisation could develop. But the Commission structure was left largely intact, and not much real change has in fact happened. Devotion to tradition may play a role, but formal obstacles to make changes happen on the time scale of modern scientific progress were certainly a major factor.

The EC is firmly determined to keep the IAU as an active force in making our science flourish on the international scene, not just a custodian of tradition. This can only be done by active researchers who get together and decide what needs to be done, what the IAU can do, and how. The EC and Officers cannot make major new initiatives happen, only facilitate them. The new Statutes and Bye-Laws restructure the IAU to promote and facilitate timely adaptation to new scientific challenges.

#### Divisions

The main permanent units of the IAU will be the Divisions, which are created, merged, or discontinued by the GA on the proposal of the EC. Division Presidents and Vice-Presidents are also appointed by the GA on the proposal of the EC, following their internal nomination procedures which will be as uniform as possible. The Divisions have considerable autonomy within their fields and can take new initiatives in short order. Divisions may create, merge, or discontinue Commissions and Commission Working Groups, submit proposals for IAU meetings, and propose new Individual Members. The EC can approve such initiatives by (e-)mail - i.e. rapidly, if needed. The choice of Division Officers will therefore be even more important in the future.

A new Division XII will host the few Commissions that were not yet in a Division. At first sight they are very diverse, ranging from atomic and other data via telegrams, history, and education to the protection of the environment. However, their common thread is to deal with matters of Union-wide concern and involving other international organisations, such as the UN, ITU, OECD, and ICSU. These not only require close contacts with the EC and the General Secretary, but often have non-intuitive links which can be developed through the Organising Committee of Division XII.

In order to strengthen communication between the Divisions and the EC, the Division Presidents are already invited to the EC meetings when the GAs are planned and held; this will continue.

#### Commissions

The role of the Commissions has caused heated debate since the introduction of the Divisions. The main viewpoints on existing Commissions are, in slight caricature:

- (i) this Commission does a perfect job and should be left alone; and
- (ii) this Commission has become a forum for recycling honorary titles in an old-boys club of marginal relevance to modern science. Clearly, they describe different Commissions!

To the EC, the main problem is not the occasional inactive Commissions, but those we are missing: Modern fields have sprung up basically outside the IAU structure. A few Commissions have indeed merged and modernised as their fields developed (e.g. astrometry and education), but much more needs to be done. Therefore, the new structure has been designed especially to encourage renewal of the Commission structure. But we stress emphatically that the goal of this exercise is the progress of science, not change for its own sake.

In the future, Commissions are created, merged, or discontinued by the Divisions with the approval of the EC; and they may belong to two or more Divisions. The election of Commission Presidents and Organising Committees is also approved by the Division. Present and new Commissions have a default life span of six years, after which their work is reviewed; their continuation will then require explicit approval every three years (the "sunset clause").

Obviously, no well-functioning Commission needs to fear for its life. But science must be the focus. Reviewing the Commissions' activities and action plans regularly will encourage them and the Division to reflect anew on their scientific effectiveness. And the freedom to have new initiatives approved in a matter of weeks rather than years will encourage active people to propose them.

Finally, the old limit of three Commissions to which members could belong will disappear from the Working Rules. Astronomy today is increasingly multi-disciplinary and multi-wavelength, and the rule no longer makes sense.

# Working Groups

In principle, Working Groups are created to study specific issues for a definite time. In practice, they tend to perpetuate themselves after the initial work is done. Keeping track of the Working Groups and their membership has long been a well-nigh impossible task for the Secretariat, and one of increasingly doubtful reward.

Divisions and Commissions are now free to create such Working Groups as they need, with the approval of the next higher level (EC, Division). The parent Division/Commission itself will keep track of its Working Groups and their membership, using its web site. Working Groups are also under a "sunset clause" and cease to exist after three years, unless their continuation is justified again and approved by its parent Division/Commission.

#### Over to the membership!

The IAU is often criticised by young astronomers for being slow, conservative, and bureaucratic. The new Statutes and Bye-Laws remove the formal obstacles for the IAU to play an even more constructive role in international astronomy in the 21st century. But lifting a barrier does not create motion by itself: This potential will only be realised through the imagination, energy, and dedication of the IAU members. The EC and Officers enthusiastically encourage and support all constructive initiatives for the IAU to assume a proactive and prominent role in the progress of the science which brings us all together.

#### 7.3. RESOLUTIONS OF THE XXVth GENERAL ASSEMBLY

#### RESOLUTIONS B

#### B.1. Public Access to Astronomical Archives

The General Assembly of the International Astronomical Union

#### Recognising

- 1. That scientific advances rely on full and open access to data,
- 2. That it is in the interests of astronomy generally that archive data be made as widely accessible as possible, and that the technology exists via the worldwide web to do so cheaply and effectively,
- 3. That the development of the Virtual Observatory will enable effective use to be made of such archives, thus increasing the effectiveness and scientific return of astronomical research,

### Considering

- 1. That access to observing time on major astronomical facilities is sometimes necessarily and legitimately restricted for funding or other reasons,
- 2. That after data have been obtained on such a facility, that access to such data is often necessarily and legitimately restricted for some period (the "proprietary period", typically of one to two years), to the observer, students, instrument builder, or other defined groups, so that they may have a reasonable opportunity to publish their results, and thereby capitalise on their investment of time and resources put into the observations,
- 3. That in many cases, after this proprietary period the data are placed in a data archive where they are made more widely available,

#### Recommends

- 1. That data obtained at major astronomical facilities should, after a reasonable proprietary period in which they are available only to observers or other designated users of the facility, be placed in an archive where they may be accessed via the internet by all research astronomers. As far as possible, the data should be accompanied by appropriate metadata and other information or tools to make them scientifically valuable.
- 2. That such data should not be subject to intellectual property rights. The form in which data are made available, and the subsequent processing of such data, may be appropriately protected by copyright laws, but the fair usage (including educational purposes) of the archive data themselves should not be subject to restrictions,
- 3. That funding agencies provide encouragement and support to enable data produced by astronomical research that they fund to be deposited, after some proprietary period as defined above, in recognized data archives which provide unrestricted access to these data.

#### B.1. Accès Public aux Données Archivées Astronomiques

# L'Assemblée Générale de l'Union Astronomique Internationale

#### Reconnaissant

- 1. Que les avancées scientifiques reposent sur un accès complet et ouvert aux données.
- 2. Qu'il est dans l'intérêt général de l'astronomie que les données archivées soient rendues aussi accessibles que possible, et que des technologies existent, via le "World Wide Web", pour le faire de façon peu coûteuse et efficace,
- 3. Que le développement de l'Observatoire Virtuel rendra possible une utilisation efficace de ces archives, augmentant ainsi l'efficacité et le retour scientifique de la recherche astronomique,

#### Considérant

- Que l'accès au temps d'observation dans les grands observatoires astronomiques est quelquefois restreint pour des raisons nécessaires et légitimes, liées à leur financement ou autres raisons,
- 2. Qu'après que les données aient été obtenues par un observatoire, l'accès à ces données est souvent, pour des raisons nécessaires et légitimes, restreint pendant une certaine période (la "période propriétaire", en général de un à deux ans) à l'observateur, aux étudiants, aux constructeurs de l'instrument, ou à d'autres groupes identifiés au préalable, de telle sorte que ceux-ci aient l'occasion de publier leurs résultats dans des délais raisonnables, et ainsi de tirer profit des investissements en temps et en moyens consentis par eux pour ces observations,
- 3. Que dans de nombreux cas, après la période propriétaire, les données sont placées dans une archive où elles sont rendues plus largement accessibles,

# Recommande

- 1. Que les données obtenues par les grands observatoires soient, après une période propriétaire raisonnable, pendant laquelle elles sont réservées aux observateurs ou à d'autres utilisateurs identifiés de l'observatoire, placées dans une archive où elles seront accessibles via "internet" à tous les chercheurs en astronomie. Autant que possible, les données doivent être accompagnées des métadonnées appropriées, et des informations et des outils nécessaires pour qu'elles soient utilisables pour des objectifs scientifiques;
- 2. Que ces données ne soient pas soumises à des droits de propriété intellectuelle. La forme sous laquelle ces données sont mises à disposition, et les traitements ultérieurs qu'elles ont subis, peuvent être protégés de façon appropriée par les lois sur le copyright, mais l'usage légitime (y compris pour des objectifs liés à l'éducation) des données archivées elle-mêmes, ne devrait pas être soumis à restrictions,
- 3. Que les organismes de financement encouragent et aident à ce que les données produites par la recherche astronomique qu'ils financent soient déposées, après une période propriétaire comme definie ci-dessus, dans des archives reconnues, assurant un accès non restreint à ces données.

# B.2. Resolution proposed by Commission 46

# The International Astronomical Union

# Considering

- 1. That scientific and mathematical literacy and a workforce trained in science and technology are essential to maintain a healthy population, a sustainable environment, and a prosperous economy in any country,
- 2. That astronomy, when properly taught, nurtures rational, quantitative thinking and an understanding of the history and nature of science, as distinct from reproductive learning and pseudo-science,
- 3. That astronomy has a proven record of attracting young people to an education in science and technology and, on that basis, to careers in space-related and other sciences as well as industry,
- 4. That the cultural, historical, philosophical and aesthetic values of astronomy help to establish a better understanding between natural science and the arts and humanities,
- 5. That, nevertheless, in many countries, astronomy is not present in the school curriculum and astronomy teachers are often not adequately trained or supported, but
- 6. That many scientific and educational societies and government agencies have produced a variety of well-tested, freely-available educational resource material in astronomy at all levels of education,

#### Recommends

- 1. That educational systems include astronomy as an integral part of the school curriculum at both the elementary (primary) and secondary level, either on its own or as part of another science course,
- That educational systems and national teachers' unions assist elementary and secondary school teachers to obtain better access to existing and future training resources in astronomy in order to enhance effective teaching and learning in the natural sciences,
- 3. That the National Representatives in the IAU and in Commission 46 call the attention of their national educational systems to the resources provided by and in astronomy, and
- 4. That members of the Union and all other astronomers contribute to the training of the new, scientifically literate generation by assisting local educators at all levels in conveying the excitement of astronomy and of science in general.

#### B.2. Résolution proposée par la Commission 46

# L'Union Astronomique Internationale

#### Considérant

- Que des connaissances de base en mathématiques et dans les autres sciences, et une main-d'oeuvre qualifée en science et en technologie sont, dans tout pays, essentielles pour soutenir la santé de la population, un environnement durable, et une économie prospère,
- 2. Que l'astronomie, convenablement enseignée, nourrit une pensée rationnelle et quantitative, et une compréhension de l'histoire et de la nature des sciences, par opposition à une acquisition routinière des connaissances, et aux pseudo-sciences,
- 3. Que l'astronomie a prouvé sa faculté d'attirer les jeunes vers une éducation scientifique et technologique, et, sur cette base, vers des carrières orientées vers les sciences spatiales et autres, aussi dans l'industrie,
- 4. Que les valeurs esthétiques, culturelles, historiques et philosophiques de l'astronomie aident à établir une meilleure compréhension entre, d'une part les sciences, et d'autre part les arts et les humanités,
- 5. Que, néanmoins, dans de nombreux pays, l'astronomie n'est pas présente dans le curriculum scolaire, et les professeurs pour l'astronomie sont souvent mal préparés à cette tâche, mais
- 6. qu'il existe, en astronomie, un choix de matériels éducationnels gratuits et éprouvés, mis au point par des associations éducatives et scientifiques privées ou par des organismes publics, pour tous les niveaux

#### Recommande

- 1. Que les systèmes éducatifs incluent l'astronomie comme partie intégrante du curriculum scolaire, aux deux niveaux d'enseignements primaire et secondaire, soit en tant que telle, soit comme partie d'un autre enseignement scientifique,
- 2. Que les systèmes éducatifs, et les associations nationales de professeurs, aident les enseignants du primaire et du secondaire à obtenir un meilleur accès aux ressources éducatives en astronomie, existantes ou futures, afin d'accroître l'efficacité de l'enseignement des sciences de la nature,
- 3. Que les représentants nationaux à l'UAI, et les membres de la Commission 46, attirent l'attention de leurs systèmes d'éducation nationale sur les ressources disponibles pour l'enseignement de l'astronomie, et
- 4. Que les membres de l'UAI, et tous les autres astronomes, contribuent à la formation d'une nouvelle génération formée au langage de la science, en aidant les enseignants locaux à tous les niveaux à propager le goût pour l'astronomie et les sciences en général.

# B.3. Resolution proposed by the EC "2009: The Year of Astronomy"

# The International Astronomical Union

#### Recalling

That the introduction of the telescope in astronomical observations brought about A fundamental revolution in humankind's perception of the world outside the Earth,

#### Recognizing

That the series of developments initiated by this event led, in time, not only to the vast and richly detailed view of the Universe and humankind's place in it which is modern cosmology, but to the entire framework of fact-based empirical investigation and analysis which underlies contemporary science and technology, and

# Considering

That the immediate appeal of astronomy to the imagination of humans in all walks of life remains one of the most powerful ways to kindle the interest of young people everywhere in scientific research and education, and thus to contribute to the progress of the quality of human life,

#### Recommends

That the year 2009, the 400th anniversary of Galileo's accomplishments and the real birth of modern telescopic astronomy, be declared the "Year World of Astronomy", in which the potential of astronomy to enlighten and enrich humans will be brought to the largest possible audience all over the world, and

#### Requests

That the Officers and Executive Committee with support from Commission 41 initiate prompt and effective action to organize this important worldwide event, in collaboration with all appropriate national and international organizations.

# B.3. Résolution proposée par le EC-WGRP "2009: l'Année Mondiale de l'Astronomie"

# L'Union Astronomique Internationale

# Rappelant

Que l'introduction du télescope dans l'observation astronomique a amené une révolution dans la perception par l'humanité du monde au-delà de la Terre,

#### Reconnaissant

Que la série de développements issue de cet événement a conduit au cours du temps, non seulement à une vision cosmologie vaste et détaillée de l'Univers et de la place de l'humanité dans ce dernier, mais aussi au cadre entier des concepts sur lesquels reposent la science et la technologie contemporaines, et

#### Considérant

Que l'attrait immédiat de l'astronomie dans l'imagination des humains demeure un des moyens les plus puissants de susciter l'intérêt des jeunes de partout, vers l'éducation et la recherche scientifique, et donc de contribuer à l'amélioration de la qualité de la vie,

#### Recommande

Que l'année 2009, le 400ième anniversaire des découvertes de Galilée et du début de l'emploi du télescope en astronomie, soit déclarée "Année Mondiale de l'Astronomie", et qu'au cours de laquelle le potentiel de l'astronomie à illuminer et enrichir l'homme soit porté à l'audience la plus large possible dans le monde entier, et

#### Demande

Que les responsables et le Comité Exécutif de l'UAI, avec le soutien de la Commission 41, entreprennent une action rapide et efficace pour organiser cet événement mondial, en collaboration avec les organisations nationales et internationales appropriées.

# 7.4. BUDGET 2004-2006

(All amounts are in Swiss Francs - CHF)

INCOME	2003 *	2004	2005	2006
Adjustment for inflation		3,00%	3,2%	3,40%
Unit of contribution	3 260	3 355	3 460	3 580
Number of units of contribution	260	263	263	263
ADHERING ORGANIZATIONS	847 600	882 365	909 980	941 540
ICSU/UNESCO	15 000			
PUBLICATIONS: ROYALTIES	25 000	15 000	15 000	15 000
BANK INTEREST	25 000	25 000	25 000	25 000
TOTAL INCOME	912 600	922 365	949 980	981 540

 $<sup>^{\</sup>star}~~2003~budget~as~approved~at~the~XXIV th~General~Assembly$ 

# (All amounts are in Swiss Francs - CHF)

EXPENDITURE	2003 *	2004	2005	2006
SCIENTIFIC ACTIVITIES				
General Assembly				
Grants	180 000			190 000
Commission Presidents	40 000			45 000
Operation	45 000	4 000	4 000	45 000
Sub-total General Assembly	265 000	4 000	4 000	280 000
Meetings				
Symposia/Colloquia	240 000	280 000	280 000	280 000
Regional Meetings		30 000	30 000	
Sub-total Meetings	240 000	310 000	310 000	280 000
Commissions & Working Grps				
Telegram Bureau (06)	4 000	4 000	4 000	4 000
Minor Planet Center (20)	6 000	8 000	8 000	8 000
Meteor Data Center (22)	1 100	1 500	1 500	1 500
EC WGs Commission WGs	5 000 5 000	7 000 5 000	7 000 5 000	7 000 5 000
Sub-total Commissions & Working Grps	21 100	25 500	25 500	25 500
Total SCIENTIFIC ACTIVITIES	526 100	339 500	339 500	585 500
EDUCATIONAL ACTIVITIES				
ISYA (46)		45 000	45 000	
TAD (46)	40 000	45 000	45 000	45 000
Exchange of Astronomers (38)	20 000	15 000	15 000	15 000
Other activites	10 000	10 000	10 000	10 000
Total EDUCATIONAL ACTIVITIES	70 000	115 000	115 000	70 000
DELEGATES TO OTHER UNIONS DUES TO OTHER UNIONS	10 000	10 000	10 000	10 000
ICSU	17 000	20 000	20 000	20 000
IERS/FAGS	7 500	7 500	7 500	7 500
IUCAF	7 500	7 500	7 500	7 500
Total DUES TO UNIONS/ORGANIZATIONS	32 000	35 000	35 000	35 000
EXECUTIVE COMMITTEE				
Executive Committee meetings	75 000	35 000	55 000	60 000
Officers meetings	6 000	5 500	5 500	5 500
General Secretary expenditure	30 000	30 000	30 000	30 000
President expenses	1 000	2 000	2 000	2 000
Assist General Secretary expenses	2 000	2 000	2 000	2 000
Total EXECUTIVE COMMITTEE	114 000	74 500	94 500	99 500
PUBLICATIONS				
Information Bulletin	30 000	24 000	24 000	24 000
Free Distribution	10 000	10 000	10 000	10 000
Total PUBLICATIONS	40 000	34 000	34 000	34 000
ADMINISTRATION/SECRETARIAT				
Salaries & Charges	175 000	175 000	175 000	175 000
Training courses	5 000	5 000	5 000	5 000
General office expenses	72 000	75 000	75 000	75 000
Audit fee Bank charges	2 500 4 000	2 500 4 000	2 500 4 000	2 500 4 000
Total ADMINISTRATION/SECRETARIAT	258 500	261 500	261 500	261 500
TOTAL EXPENDITURE	1 050 600	869 500	889 500	1 095 500
Excess/Loss of Income over Expenditure	-138 000	52 865	60 480	-113 960

<sup>\* 2003</sup> budget as approved at the XXIVth General Assembly

#### 8. XXVIth & XXVIIth GENERAL ASSEMBLIES

#### 8.1. REPORT ON THE PLANNING OF THE XXVIth GENERAL ASSEMBLY

The next IAU General Assembly will take place in Prague, capital of the Czech Republic, August 14-25, 2006. It will be 39 years after the first IAU GA to be held there. Prague has a long and rich history of astronomy and physics. Among the well-known scientists who worked in Prague were Tycho Brahe, Johannes Kepler, Christian Doppler, Ernst Mach, and Albert Einstein. There are other outstanding personalities that had an intimate link to this city. For example, W. A. Mozart, whose opera Don Giovanni was performed for the first time in Prague. It is hardly surprising that worldwide famous film director Miloš Forman shot his film "Amadeus" in Prague. The writer Franz Kafka spent all his life in Prague; his novel "The Castle" was probably inspired by Prague Castle.

The preparations of the event have already began - contracts were signed with the two agencies that will be responsible for the organization: ICARIS for the scientific part, Congress Business Travel Ltd. (CBT) for registration, accommodation, social and cultural events, excursions, etc.). A contract was also signed with the Prague Congress Center, the venue of the GA. It is located quite close to the city center, and it is sufficiently large to host all the meetings, the capacity of the main hall being 2800 persons. It was the venue of such large events as the meeting of the International Monetary Fund (2001) or NATO (2002).

The National Organizing Committee for the XXVIth IAU General Assembly in Prague 2006 has been formed and approved by the Czech National Committee for Astronomy. Its composition is as follows:

Jirí Bicák

Jirí Bricák

Jirí Grygar

Petr Hadrava

Petr Harmanec

Petr Heinzel

Petr Heinzel

Vladimír Karas

Institute of Theoretical Physics, Charles University, Prague

Institute of Physics, Academy of Science, Prague

Astronomical Institute, Academy of Sciences Ondrejov

Astronomical Institute, Charles University, Prague

Astronomical Institute, Charles University, Prague

Zdenek Mikulášek Dpt of Theoretical Physics/Astrophysics, Masaryk University, Brno

Jan Palouš Chair, Astronomical Institute, Academy of Sciences, Prague
Martin Šolc Astronomical Institute, Charles University, Prague
Vice-Chair, Astronomical Inst., Academy of Sciences, Prague

Marek Wolf Astronomical Institute, Charles University, Prague

The participants of the XXVth IAU GA in Sydney surely have not overlooked the CBT stand in exhibition area, where two nice ladies were distributing posters and leaflets with information about the upcoming XXVIth IAU GA in Prague, the poem "Are there frogs there, too?" by Jan Neruda that became quite popular, and also were giving information on Prague and the Czech Republic in general. There are still some posters and leaflets left, and CBT agency (postal address: GA IAU 2006 Secretariat, Congress Business Travel Ltd., Lidická 43/66, 150 00 Praha 5, Czech Republic, e-mail: astro2006@cbttravel.cz) is ready to send them to interested parties.

The CBT also established the website: www.astronomy2006.com with preliminary information, where a pre-registration can be made even now.

October 17, 2003 Jan Palouš, Jan Vondrák

#### 8.2. IAU XXVIIth GENERAL ASSEMBLY

The XXVIIth IAU General Assembly will be held in Rio de Janeiro, Brazil, on August 2-15, 2009 (probable dates). The City of Rio de Janeiro is well-known to be a wonderful site, by its culture and its people. It is located in a beautiful environment which brings dramatically together the mountains and the sea in a luxuriant tropical setting, all this highlightened by the friendliness of its people. The great concentration of scientific and technological activities also characterizes Rio as one of the most important centers in Brazil and Latin America. The IAU General Assembly will take place at the modern RioCentro Convention Center, and most participants will be lodged in hotels at Barra da Tijuca.

The Brazilian astronomers are very happy that the invitation by the Ministry of Science and Technology, the Brazilian Committee for Astronomy and the Brazilian Astronomical Society has been accepted by the IAU, and they are looking forward to warmly welcome all participants of the XXVIIth IAU General Assembly.

The initial committee for the preparation of GA XXVII was nominated at the Brazilian Astronomical Society meeting in August 2003 and is as follows:

Jose Renan de Medeiros Brazilian Commission for Astronom <renan@dfte.ufrn.br>
Kepler de Oliveira President of Brazilian Astronomical Society <kepler@if.ufrgs.br>

Daniela Lazzaro Chair <a href="mailto:chair-azzaro@on.br">chair <a href=

Beatriz Barbuy Co-Chair <barbuy@astro.iag.usp.br>

Licio da Silva licio@on.br>

Walter Maciel <maciel@astro.iag.usp.br>

Beatriz Barbuy

# 9. SPECIAL ANNOUNCEMENTS

#### 9.1. THE COSMOLOGY PRIZE OF THE PETER GRUBER FOUNDATION (PGF)

The Peter Gruber Foundation Cosmology is awarded annually to scientists of any nationality working in the fields of astronomy, physics, mathematics, and philosophy of science for scientific advances in our understanding of the Universe. The IAU provides its expertise and contacts with professional astronomers worldwide for the nomination and selection of Cosmology Prize winners.

The PGF Prize for 2003 was awarded to Prof. Rashid Sunyaev at the XXVth General Assembly of the IAU in Sydney, for his pioneering studies of the nature of the cosmic microwave background and its interaction with intervening matter. Prof. Sunyaev is a director of the Max Planck Institute of Astrophysics, Germany, and he is also affiliated with the Russian Academy of Sciences in Moscow. Born in Uzbekistan, Sunyaev became one of the most important and prolific members of the Moscow group that pioneered Relativistic Astrophysics. Together with the group's illustrious leader Yakov B. Zel'dovich, he studied the relic radiation from the Big Bang leading to early tests of cosmological models that are still valid and have provided impetus to one of the most active areas of observational cosmology. Sunyaev's contributions have been wide-ranging. Together with Zel'dovich he was the first to describe the apparent cooling of radiation as it passes through hot gas, a process now referred to as the Sunyaev-Zel'dovich Effect. More recently, Sunyaev led the team that built and operated the Kvant X-ray observatory for the MIR space station and the GRANAT orbiting X-ray observatory. He continues to be a leader in the area of X-ray astronomy.

Nominations for the Cosmology Prize for 2004 may be submitted by individuals, organizations and institutions (comprising individual IAU members and astronomical institutions). For information on the required procedures and for the nomination forms to be used, see the web page of the Peter Gruber Foundation at:

http://www.petergruberfoundation.org/

#### 9.2. THE PETER GRUBER FOUNDATION FELLOWSHIPS

Under the agreement with the IAU, the Peter Gruber Foundation also funds a fellowship program for young astronomers, with the aim of promoting the continued recruitment of new talents into the field. Created in 2000, the PGF-IAU Fellowships has awarded fellowships of USD 37,500 each to two young scientists, every three year. The host institution of the postdoctoral appointment shall be a center of excellence in the applicant's field of research, located in a country different from that of the applicant's current country of residence.

The following two young talents were awarded the fellowships for 2003-2005:

Dr. Mayra Osorio, age 34, from the National University of México, will work on modeling emission from dust and molecules in protostellar envelopes and disks. She will be working at Instituto de Astrofisica de Andalucia, Granada, Spain.

Dr. Yiannis Tsamis, age 31, from Thessaloniki, Greece, with a PhD from University College London, will study chemical inhomogeneities in H II regions, while at Observatoire de Paris-Meudon, France.

The IAU is happy to congratulate these two Fellows on their awards and wish them successful and rewarding stays at their respective host institutes!

The deadline for receipt of applications for grants (2006-2009) has been set on April 30, 2006.

# 9.3. PROF. ADRIAAN BLAAUW TURNS 90 YEARS

In April 2004, Professor Adriaan Blaauw turns 90th birthday. Adriaan and colleagues at the Kapteyn Astronomical Institute in Groningen and Leiden Observatory, look forward to celebrating this occasion on Saturday afternoon, April 17, 2004.

An informal get-together is planned at the 19th-century country-mansion Nienoord in Leek, near Groningen, from 3 to 6 pm. While formal announcements will be made early in 2004, we hope you will already mark the date on your new calendar.

Also on behalf of Adriaan,

Piet van der Kruit (Kapteyn Astronomical Institute, Groningen) Tim de Zeeuw (Leiden Observatory)

# 10. EDUCATIONAL ACTIVITIES

# PG ON TEACHING FOR ASTRONOMY DEVELOPMENT (TAD) Report on activities, October 2002 - August 2003

#### Morocco

Prof. Bruce Partridge (Haverford College, USA) visited University Hassan II, a current part of the TAD program, and Al Akhawayn University, which may soon be joining the TAD operation in Morocco. The dates of his visit were Oct. 1-10, 2002.

In addition to the purchase of introductory books in astronomy to start the TAD program

at Al Akhawayn University, TAD supplied roundtrip airfare (and some fees) to three Moroccan students for study or research abroad: Mr. Aziz Allali to Nice, France, to study gravitation for his Advanced Diploma in Astronomy; Ph.D. student Mohamed Ghabouri to Strasbourg, France, to study white dwarfs for three months with Prof. Olivier Bienayme; and Mr. Mohamed Hammani to Nijmegen, The Netherlands, in August 2003 to attend the summer school on Particle and Nuclear Astrophysics.

#### Philippines

Books and journals were purchased to start the TAD program at PAGASA (the Philippines National Weather Service). In support of this new program, visits by three astronomers were arranged and airfare for the visitors was paid by TAD:

Prof. Armando Arellano Ferro (UNAM, México) delivered a 3-week course March 1-25, 2003 on variable-star observing and data reduction, and he created an on-going observing program; Prof. Patrick Leahy (NRAL, UK) gave a 2-week course June 13-29, 2003 on large-scale structure and cosmology; and Prof. Kam-Ching Leung (University of Nebraska, USA) delivered a 2-week course July 31 through August 16, 2003 on stellar astrophysics.

#### Viet Nam

TAD provided partial support of a conference conducted April 10-11, 2003 at Hanoi Pedagogical Institute and titled "Astronomy and Development of Culture and Education in New Era". In addition, support was also given for a conference of Vietnamese university astronomy teachers in Vinh City August 16-21, 2003. Travel support was given Prof. Nguyen Din Huan (Vinh University) to attend the IAU's General Assembly in Sydney.

Jay White and Donat G. Wentzel, Chairmen of the TAD ProgramGroup

# 10.2. PRE-ANNOUNCEMENT OF THE 27TH INTERNATIONAL SCHOOL FOR YOUNG ASTRONOMERS (ISYAs)

The 27th International School for Young Astronomers is foreseen to be held at the University Al Akhawayn, Ifrane, Morocco (July 2-23, 2004). The language of the School will be English.

Among the topics to be covered are:

- Galaxies, Stellar Populations,
- Cosmology,
- Dynamics of the Solar System,
- Stellar Astrophysics,
- Binaries,
- Extrasolar Planets
- High Energy Astrophysics.

Applications should include your achieved level of studies in physics and astronomy and any topic of special interest.

Accommodation will be supported by Al Akhawayn University. Travel grants will be available.

A letter of recommendation is required, evaluating academic standing and proficiency in English.

Applications and letters of reference should arrive at the latest by March 15, 2004, by email preferably, to:

Dr. Michèle Gerbaldi, Chairperson for ISYAs

Institut d'Astrophysique de Paris

98 bis, bd Arago

FR - 75014 Paris, France

Fax: +33 1 44 32 80 01 - E-mail: gerbaldi@iap.fr

Dr. Hassane Darhmaoui Dr. Khalil Chamcham

Al Akhawayn University, School University of Oxford, Astrophysics

of Science & Engineering Denys Wilkinson Building

P.O. Box 1841 Keble Road

MA - Ifrane 53000, Morocco GB - Oxford OX1 3RH, UK Email: H.Darhmaoui@alakhawayn.ma Email: chamcham@astro.ox.ac.uk

# 11. IAU REPRESENTATIVES TO INTERNATIONAL ORGANIZATIONS 2003-2006

Acronym	Organization	Representative(s)
ICSU	International Council of Scientific Unions General Committee	O. Engvold
BIPM	Bureau International des Poids et Mesures CCTF: International Consultative Committee for the Time Frequency	T. Fukushima
	CCU: Comité Consultatif des Unités	N. Capitaine
CIE	Compagnie Internationale de l'Eclairage	S. Isobe
CODATA	Committee on Data for Science & Technology	R. Norris
COSPAR	Committee on Space Research	
	Council	H. Rickman
	Sci. Comm. B	M. Marov
	Sci. Comm. D	M. Vandas
	Sci. Comm. E	W. Wamsteker
	Sci. Comm. E1 Sci. Comm. E2	G. Srinivasan A. Benz
FACC	Federation of Astronomical	
FAGS		N. Capitaine /
IAT	& Geophysical Services International Astronautical Federation	E.A. Tandberg-Hanssen
IAF		111 0111101
IERS	International Earth Rotation Service	J. Vondrak (until 2004)
IGBP	International Geosphere-Biosphere Programme	R. Strom
IUCAF	Inter-Union Commission on Frequency Allocation for Radio Astronomy & Space Sciences	K. Tapping / D.Emerson / J. Cohen
IUPAP	International Union of Pure & Applied Physics	H. Rickman
	Comm. 4 Commission on Cosmic Rays Comm. 19 Commission on Astrophysics	H. Voelk V. Trimble
ITU	International Telecommunication Union ITU-R Radiocommunication Bureau	W. Klepczynski / T. Gergely / M. Ohishi
ISES	International Space Environment Service	H. Coffey
IVS	International VLBI Service	P. Wallace
SCAR	Scientific Committee on Antarctic Research	J. Storey
SCOSTEP	Scientific Committee on Solar-Terrestrial Physics	B. Schmieder
	6 Committee on the Peaceful Uses of Outer Space Scientific & Technical SubCommittee	K. A. van der Hucht
URSI	Union Radio-Scientifique Internationale	L. Rodriguez

# 12. MEMBERSHIP

We apologize most sincerely to Dr. Mikolaj Jerzykiewicz, whose death has erroneously been reported in this IB 94 (paper version), while we know he is alive and healthy.

The General Secretary regrets to report the names of former and current IAU members whose death has been communicated to the Secretariat since the previous list published in IB 93:

Ko Aizu	Lawrence Hugh Aller	Horace W. Babcock
Semion Ya Ag Braude	Anton Bruzek	William Buscombe
Henri Camichel	Yves Chmielewski*	Chr. de Vegt
Aleksandr N. Deutsch	Lorant Dezso *	Hans Elsaesser
Nüzhet Gökdogan*	Friedrich Gondolatsch *	Shumo Gong
Fumihiko Hagio *	Gerald S. Hawkins	Helmut W. Hellwig
Reiun Hoshi	Theodor S. Jacobsen	Sidney Kenderdine
Vera L. Khokhlova	Petr G. Kulikovskij	Vojtech Letfus
Gyorgy Marx	Klaus Metz	Mirta B. Mosconi
Franco Occhionero	Ludwig F. Oster	Lucia Padrielli *
Alain Peton	Jack H. Res.Fel. Piddington	Girolamo Pinto
Douglas H Sampson	Hans Schmidt	Egon H. Schroeter
Aleksandr S. Sharov	Akira M Sinzi	Anne B Underhill
Yurij I. Vitinskij	Lai Wan	John R Winckler
Kiyoshi Yabuuti	D. Zulevic	

<sup>\*</sup> Death announced after the publication of IB 94 (paper version).

# 13. IAU PUBLICATIONS

# PRICING\*

1. Symposia

Non-Member/Library/Institution: USD 95.00 - IAU Member/Attendee: USD 42.00

2. Transactions

Non-Member/Library/Institution: USD 125.00 - IAU Member: USD 80.00

3. Highlights

Non-Member/Library/Institution: USD 95.00 - IAU Member/Attendee: USD 56.00

- \* Note: Discounts are for IAU Individual Members ONLY.
  If you would like to establish a standing order for the IAU Publications, please email the ASP at: service@astrosociety.org
- 13.1. IAU SYMPOSIA (Astronomical Society of the Pacific)
- New Cosmological Data & the Values of the Fundamental Parameters Manchester, UK, August 7-11, 2000
   Eds. A. Lasenby, A. Wilkinson & A.W. Jones ASP, in prep.
- Planetary Systems in the Universe: Observation, Formation & Evolution Manchester, UK, August 7-10, 2000
   Eds. A. Penny, P. Artymowicz, A.-M. Lagrange & S. Russell ASP, in prep.

- Astrophycisal Supercomputing Using Particle Simulations
   Tokyo, Japa, July 10-13, 2001
   Eds. J. Makino & P. Hut
   ASP, ISBN 1-58381-139-7, 2003
- 209 Planetary Nebulae: Their Evolution & Role In the Universe Canberra, Australia, November 19-23, 2001
   Eds. S. Kwok, M. Dopita & R. Sutherland ASP, ISBN 1-58381-148-62003
- Modeling of Stellar Atmospheres
   Uppsala, Sweden, June 17-21, 2002
   Eds. N. Piskunov, W.W. Weis & D.F. Gray
   ASP, ISBN 1-58381-160-5, 2003
- 211 Brown Dwarfs Waikoloa, Hawaii, USA, May 20-24, 2002 Ed. E.L. Martin ASP, ISBN 1-58381-1328-X, 2003
- 214 High Energy Processes & Phenomena in Astrophysics Suzhou, China, August 6-10, 2002
   Eds. X.D. Li, V. Trimble & Z.R. Wang ASP, ISBN 1-58381-157-5, 2003

#### 13.2. IAU COLLOQUIA

- Magnetic Cataclysmic Variables
   Cape Town, South Africa, December 8-13, 2002
   Eds. M. Cropper & S. Vrielmann
   ASP-CS, in prep.
- 189 Astrophysical Tides: Effects in the Solar & Exoplanetary Systems Nanjing, China, September 16-20, 2002
  Eds. S. Ferraz-Mello & I.P. Williams
  Celestial Mechanics and Dynamical Astronomy 87, Nos.1-2, 2003
- 188 Magnetic Coupling of the Solar Atmosphere Santorini, Greece, June 11-15, 2002 Ed. H. Sawaya-Lacoste ESA SP-505, ISBN 92-9092-815-8, 2002
- Cometary Science after Hale-Bopp
   Tenerife, Spain, January 21-25, 2002
   Eds. H. Boehnhardt, M. Combi, M.R. Kidger & R. Schulz
   Kluwer Acad. Publ., ISBN 1-4020-1288-8, 2003
- 185 Radial & Nonradial Pulsations as Probes of Stellar Physics Leuven, Belgium, July 26-31, 2001
   Eds. C. Aerts, T.R. Bedding & J. Christensen-Dalsgaard ASP-CS 259, ISBN 1-58381-099-4, 2002
- Sources & Scintillations: Refraction and Scattering in Radio Astronomy Guiyang, China, April 17-21, 2000
   Eds. R. Strom, P. Bo, M. Walker & N. Rendong ApSS 278, Nos. 1-2, 2001

- Dust in the Solar System & other Planetary Systems
   Canterbury, UK, April 4-10, 2000
   Eds. D.S.F. Green, I.P. Williams, J.A.M. McDonnell & N. McBride
   Pergamon, COSPAR Coll. Ser., Vol. 15, ISBN 0080441947, 2002
- Towards Models & Constants for Sub-Microarcsecond Astrometry Washington, DC, USA, March 20-25, 2000
   Eds. K.J. Johnston, D.D. McCarthy, B. Luzum & G.H. Kaplan US Naval Observatory, 2000
- 13.3. IAU REGIONAL MEETING (Astronomical Society of the Pacific CS)
- The Proceedings of the IAU 8th Asian-Pacific Regional Meeting Vol. I
   Tokyo, Japan, July 2-5, 2002
   Eds. S. Ikeuchi, J. Hearnshaw & T. Hanawa
   ASP-CS 289, ISBN 1-58381-134-6, 2003
- 13.4. IAU TECHNICAL WORKSHOP (Astronomical Society of the Pacific CS)
- Astronomical Site Evaluation in the Visible & Radio Range Marrakech, Morocco, November 13-17, 2000
   Eds. J. Vernin, Z. Benkhaldoun & C. Muñoz-Tuñón ASP-CS 266, ISBN 1-58381-106-0, 2002

# 14. OTHER PUBLICATIONS RECEIVED

Some publishers send copies of recent astronomy books to the IAU Secretariat. These books are to be donated upon request, on a first come first serve basis, to astronomical groups in countries lacking the financial resources to purchase them.

ASP Conference Series: http://www.astrosociety.org/pubs/cs/confseries.html

- Observational Aspects of Pulsating B & A Stars Eds. C. Sterken & D.W. Kurtz, ISBN 1-58381-096-X, 2002.
- 270 Astronomical Instrumentation & the Birth & Growth of Astrophysics Eds. F.N. Bash & C. Sneden, ISBN 1-58381-110-9, 2002.
- 291 Hubble's Science Legacy: Future Optical/Ultraviolet Astronomy From Space Eds. K.R. Sembach, J.C. Blades, G.D. Illingworth & R.C. Kennicutt, Jr., ISBN 1-58381-136-2, 2003.
- 293 3D Stellar Evolution Eds. S. Turcotte, S.C. Keller & R.M. Cavallo, ISBN 1-58381-140-0, 2003.
- Scientific Frontiers in Research on Extrasolar PlanetsEds. D. Deming & S. Seager,ISBN 1-58381-141-9, 2003.
- 296 New Horizons in Globular Cluster Astronomy Eds. G. Piotto, G. Meylan, S.G. Djorgovski & M. Riello, ISBN 1-58381-143-5, 2003.
- 297 Star Formation Through Time Eds. E. Pérez, R.M. González Delgado & G. Tenorio-Tagle, ISBN 1-58381-144-3, 2003.

- 298 Gaia Spectroscopy, Science & Technology Ed. U. Munari, ISBN 1-58381-145-1, 2003.
- 299 High Energy Blazar Astronomy Eds. L.O. Takalo & E. Valtaoja, ISBN 1-58381-146-X, 2003.
- 300 Radio Astronomy at the Fringe Eds. J.A. Zensus, M.H. Cohen & E. Ros, ISBN 1-58381-147-8, 2003.
- 301 Matter & Energy in Clusters of Galaxies Eds. S. Bowyer & C-Y. Hwang, ISBN 1-58381-149-4, 2003.
- 302 Radio Pulsars Eds. M. Bailes, D.J. Nice & S.E. Thorsett, ISBN 1-58381-151-6, 2003.
- 304 CNO In the Universe Eds. C. Charbonnel, D. Schaerer & G. Meynet ISBN 1-58381-153-2, 2003.
- 305 Magnetic Fields in O, B and A Stars Eds. L.A. Balona, H.F. Henrichs & R. Medupe ISBN 1-58381-154-0, 2003.
- 307 Solar Polarization 3 Eds. J. Trujillo Bueno & J. Sánchez Almeida ISBN 1-58381-156-7, 2003.

# World Scientific: http://www.worldscientific.com/

Discovery of Cosmic Fractals Eds. Y. Baryshev & P. Teerikorpi, ISBN 981-02-4872-5, 2002. Cosmological Specail Relativity, 2nd Edition Ed. M. Carmeli, ISBN 981-02-4936-5, 2002.

# Cambridge University Press: http://www.cambridge.org

Theoretical Astrophysics, Vol. III: Galaxies & Cosmology Ed. T. Padmanabhan,

ISBN 0-521-56630-4, 2002, (HB: GBP 36.75).

Babylon to Voyager & Behond, A History of Planetary Astronomy Ed. D. Leverington,

ISBN 0-521-80840-5, 2003, (HB:GBP 65.00/USD 95.00).

Masks of the Universe, 2nd Edition

Ed. E. Harrison,

ISBN 0-521-77351-2, 2003, (HB:GBP 20.00/USD 30.00).

Astronomy, A Physical Perspective, 2nd Edition

Ed. M.L. Kutner,

PBK: ISBN 0-521-52927-1 - HB: ISBN 0-521-82196-7, 2003, (HB:GBP 90.00/USD 120.00 - PBK:GBP 34.95/USD 75.00).

The Cambridge Guide to the Solar System

Ed. K.R. Lang,

ISBN 0-521-81306-9, 2003, (HB:GBP 30.00/USD 60.00).

New Worlds in the Cosmos, The Discovery of Exoplanets

Eds. M. Mayor & P-Y. Frei,

ISBN 0-521-81207-1, 2003, (HB:GBP 18.95/USD 30.00).

Handbook of Isotopes in the Cosmos

Ed. E. Clayton,

ISBN 0-521-82381-1, 2003, (HB:GBP 60.00/USD 90.00).

Encyclopedia of Amateur Astronomy

Ed. M.E. Bakich,

ISBN 0-521-81298-4, 2003, (HB:GBP 35.00/USD 50.00).

Encyclopedia of Space, Missions, Applications & Exploration Eds. F. Verger, I. Sourbès-Verger & R. Ghirardi & X. Pasco,

ISBN 0-521-77300-8, 2003, (HB:GBP 35.00/USD 50.00). The Gravitational Million-Body Problem

Eds. D. Heggie & P. Hut,

ISBN 0-521-77486-1, 2003.

Sky & Ocean Joined, The US Naval Observatory 1830-2000

Ed. S.J. Dick,

ISBN 0-521-81599-1, 2003, (HB: GBP 90.00).

Kluwer Academic Publishers: http://www.wkap.nl

Celestrial Mechanics & Dynamical Astronomy Eds. J. Willimas & S. Ferraz-Mello, Vol. 87 Nos 1-2, ISSN 0923-2958, 2003.

See Website: http://cadcwww.dao.nrc.ca/meetings/

# 15. OTHER MEETINGS ON ASTRONOMICAL TOPICS

# The IAU Divisions

#### Division I Fundamental Astronomy

Toshio Fukushima
Public Relation Center
NAOJ
2 21 1 Osawa Mitaka

JP - Tokyo 181 8588 Japan Tel: +81 422 34 3613

Fax: +81 422 34 3810 Toshio.Fukushima@nao.ac.jp

# Division II

Sun & Heliosphere
David F. Webb

Boston College & AFRL Space Vehicles Directorate/ VSBS

29 Randolph Rd US - Hanscom AFB MA 01731 3010 USA

Tel: +1 617 377 3970 Fax: +1 617 377 3160 david.webb@hanscom.af.mil

# Division III

**Planetary Systems Sciences** *Iwan P. Williams* 

Astronomy Unit Queen Mary University of London Mile End Rd GB - London E1 4NS United Kingdom Tel: +44 207 882 5452 Fax: +44 208 983 3522 i.p.williams@qmw.ac.uk

# Division IV Stars

Dainis Dravins Lund Observatory University of Lund Box 43 SE - 221 00 Lund Sweden

Tel: +46 46 222 72 97 Fax: +46 46 222 46 14 dainis@astro.lu.se

# Division V Variable Stars

Jørgen Christensen-Dalsgaard Dpt Physics & Astronomy University of Aarhus, Bldg 520 Ny Munkegade DK - 8000 Aarhus C Denmark Tel: +45 89 42 36 14 Fax: +45 86 12 07 40

#### Division VI Interstellar Matter

jcd@phys.au.dk

John E. Dyson
Dpt Physics & Astronomy
University of Leeds
GB - Leeds LS2 9JT
United Kingdom
Tel: +44 113 343 3869
Fax: +44 113 343 3869
jed@ast.leeds.ac.uk
j.e.dyson@leeds.ac.uk

#### Division VII Galactic System

Patricia Ann Whitelock SAAO PO Box 9 ZA - 7935 Observatory South Africa Tel: +27 21 460 9318 Fax: +27 21 447 3639 paw@saao.ac.za

# Division VIII Galaxies and the Universe

Francesco Bertola Dpt Astronomia Università di Padova Vic d Osservatorio 5 IT - 35122 Padova Italy

Tel: +39 049 827 8225 Fax: +39 049 827 8212 bertola@pd.astro.it

#### Division IX Optical & Infrared Techniques

Christiaan Leo Sterken Astronomy WE/OBSS University of Brussels Pleinlaan 2 BE - 1050 Brussels Belgium Tel: +32 2 629 34 69

Tel: +32 2 629 34 69 Fax: +32 2 629 31 74 csterken@vub.ac.be

#### Division X Radio Astronomy

Luis F. Rodriguez Instituto de Astronomía UNAM Apt Postal 72 3 Xangari MX - Morelia 58089 México

Tel: +52 443 322 2742 Fax: +52 443 322 2726 l.rodriguez@astrosmo.unam.

# Division XI Space and High Energy

Astrophysics
Haruyuki Okuda
Gunma Astronomical
Observatory
Takayama mura
Agatsuma-gun
JP - Gunma-ken 377 0702
Japan

Tel: +81 279 70 5300 Fax: +81 279 70 5544 okuda@agate.plala.or.jp

#### Division XII Union-Wide Activities

Virginia Trimble
Dpt of Physics & Astronomy
University of California
US - Irvine CA 92697 4575
USA

Tel: +1 949 824 6948 Fax: +1 949 824 2174 vtrimble@uci.edu