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PREFACE

As many readers will surely have noticed, the inner cover pages of IB 88 carried outdated information on the IAU Executive Committee and Division Presidents. I am sorry for this mistake. Our printer, ASP has agreed that the IBs be blue-proofed in order to avoid future errors of this type. Consequently, I dare guarantee that the information you'll find here is correct!

The planning for the 25th General Assembly is proceeding within the NOC, and I recommend every member to check the web page http://www.astronomy2003.com for updates on the preparations. Also, do not forget to send in the form of interest! At the same time, I hope that a lot of excellent ideas on scientific events during GA25 are now being explored and developed within all parts of our community, so that next year’s EC meeting will face a really challenging task of picking out the very best selection.

At GA24 a new rule was implemented concerning the IAU Working Groups to the effect that their setting up or continuation had to be approved by the EC. There was no time to complete that task in Manchester, but after extensive email consultations we have now come to a point where only very few cases remain pending. It is therefore time to publish a list of the WGs, and this will be found in Transactions 24B as well as in this IB. Updates and supplements will be published in future IBs whenever necessary.

A check with Commission Presidents and Vice-Presidents revealed that the list of coordinates in IB 88 needs very many updates. Therefore the whole list is published again here, including all the changes that have come to the attention of the Secretariat. I note in particular that the English name of Commission 46 was listed with a slight error. The correct name, to be read in the present list, is Astronomy Education & Development.

The list of Other Meetings on Astronomical Topics is now slimmer with a truly international flavour. However, on the IAU web page http://www.iau.org/Activities/meetings/othermeet.html a more complete list is maintained by the Assistant General Secretary, Oddbjørn Engvold. Please help him with this task by informing him of meetings that should be listed there!

With warm greetings from the IAU Officers and Secretariat.

Hans Rickman
General Secretary

1. FAITS DIVERS

Last February the IAU Secretariat moved from its premises on the 3rd floor of the Institut d'Astrophysique into offices kindly put at our disposal on the 2nd floor. Of course this meant a lot of extra work and temporary inconvenience for our Assistants, Monique and Jodi but it is paying off in terms of more space and comfort. Our thanks go to the INSU, the CNRS, and the IAP Director, Bernard Fort, for having made this move possible. As always, members passing by are welcome to visit us!

Members surfing on the web are welcome to visit the IAU home page too and will notice that it has had a slight facelift. This happened just after we had moved the web site from Copenhagen Observatory to a new server in Uppsala. There aren't many new features yet, but the material has been sorted into clickable, general topics that are listed in a menu bar-like arrangement on top of the home page. By this time all the IAU Commissions have their own web pages, and these are linked from the IAU page. Unfortunately some of them still reside at the previous Presidents' computers and carry outdated information, but your General Secretary is trying to fulfill his role as IAU web watchdog in this respect.

The next move of the IAU web site is foreseen to occur in 2003, at the end of the present triennium, and I hope that its current nomad life will then be over. The permanent place should be close to the IAU Secretariat in Paris.

It is a gratifying experience to work with astronomical news notes, as I continue to do for the Uppsala Observatory. If you don’t have time for your own research because of the administrative duties, you can then at least get a grasp of what's going on at other places and, actually, feel the dynamic evolution and growth of astronomy and astrophysics. The most exciting information for me recently was that the world’s two very big optical interferometers have seen first light – both the Keck and the ESO-VLT. Soon we shall be able to see tiny details that are as yet just fascinating dreams, be they truly small things that are nearby or much bigger objects at cosmological distances!

Such experiences act like real facelifts for a tired GS, leading an overworked Secretariat.
2. MAIN DEADLINES AND EVENTS IN 2001–2002

<table>
<thead>
<tr>
<th>Date</th>
<th>Action Item/Event</th>
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<tbody>
<tr>
<td>14-15 June</td>
<td>75th Executive Committee Meeting, Copenhagen, Denmark</td>
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<tr>
<td>18-22 June</td>
<td>IAU Colloquium 184, Byurakan, Armenia</td>
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<tr>
<td>10-13 July</td>
<td>IAU Symposium 208, Tokyo, Japan</td>
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<tr>
<td>26-31 July</td>
<td>IAU Colloquium 185, Leuven, Belgium</td>
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<tr>
<td>17-21 Sept.</td>
<td>IAU 10th Latin-American Regional Meeting, Cordoba, Argentina</td>
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<td>*15 Oct.</td>
<td>Contributions due for Information Bulletin 90</td>
</tr>
<tr>
<td>19-23 Nov.</td>
<td>IAU Symposium 209, Canberra, Australia</td>
</tr>
<tr>
<td>2002</td>
<td></td>
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<tr>
<td>TBD</td>
<td>Feb.Officers’ Meeting, Paris, France</td>
</tr>
<tr>
<td>*15</td>
<td>Feb. Proposals due for IAU Meetings in 2003</td>
</tr>
<tr>
<td>*15</td>
<td>March Submit matters for discussion at 75th EC meeting</td>
</tr>
<tr>
<td>*01</td>
<td>April Contributions due for Information Bulletin 91</td>
</tr>
<tr>
<td>TBD</td>
<td>May 76th Executive Committee meeting</td>
</tr>
<tr>
<td>17-21 June</td>
<td>IAU Symposium 210, Uppsala, Sweden</td>
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<tr>
<td>*Denotes Final Deadline</td>
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</table>

Proposals for IAU Symposia, Colloquia, and co-sponsored meetings planned for 2003 must reach the President of the appropriate Division (or Commission for Commissions not attached to a Division) no later than February 15, 2002!

in order to be considered at the 76th Executive Committee meeting. See http://www.iau.org/Activities/meetings

Note that this refers in particular to proposals for GA Symposia and Joint Discussions at GA 25!

3. CORRECTIONS AND CLARIFICATIONS TO IB 88

3.1 Inner Cover Pages

An Apology

Incorrect information appeared on the inside covers of IAU Information Bulletin 88 (January 2001). The correct “IAU Executive Committee” and “The IAU Divisions” information appears here in Information Bulletin 89. The administrative office of the Astronomical Society of the Pacific, publisher of the IAU Bulletins, regrets our error and apologizes for any inconvenience this may have caused.

James C. White II
Executive Director
The Astronomical Society of the Pacific

3.2. Proposals for Meetings in 2003

A clarification may be needed regarding the submission of proposals for IAU Meetings in 2003. In IB 88, Sect. 2, p. 3, it was stated that proposals and ideas for GA Symposia and Joint Discussions at GA 25 were welcome by March 15, 2001 (the deadline for receipt of proposals for meetings in 2002). Such proposals will be preliminarily discussed at the 75th EC meeting in order to optimize the advance planning of GA 25. However, no decisions will be taken until the full slate of proposals is available for the 76th EC meeting in 2002. Thus proposals and ideas that were not yet sent in will not suffer any disadvantage, and the continued submission of letters of intent or proposals is strongly encouraged, until the deadline of February 15, 2002.

3.3. Resolution B1.3

A typing error occurred in the first paragraph of the 3rd recommendation (see p. 30 of IB 88), which should correctly read:

"3. writing the geocentric metric tensor G_{ab} with geocentric coordinates (T, X) (T = Geocentric Coordinate Time (TCO)) in the same form as the barycentric one but with potentials W(T, X) and W'(T, X); these geocentric potentials should be split into two parts - potentials W_e and W'_e arising from the gravitational action of the Earth and external parts W_{ext} and W'_{ext} due to tidal and inertial effects; the external parts of the metric potentials are assumed to vanish at the geocenter and admit an expansion into positive powers of X_e"…”
4. SCIENTIFIC MEETINGS

4.1. Future IAU Symposia

IAU SYMPOSIUM 208 ASTROPHYSICAL SUPERCOMPUTING USING PARTICLE SIMULATIONS
July 10-13, 2001, Tokyo, Japan
Scientific Organizing Committee: Lia Athanassoula (France), James Binney (UK), Ken Freeman (Australia), Douglas Heggie (UK), Piet Hut (Co-chair, USA), Jun Makino (Co-chair, Japan), Steve McMillian (USA), Rainer Spurzem (Germany), Matthias Steinmetz (USA), Daiichiro Sugimoto (Japan), Simon White (Germany)
Chair, Local Organizing Committee: Toshiyuki Fukushige
Principal Topics:
- Dynamics of star clusters
- Dynamics of galactic nuclei
- Dynamics of galaxies and clusters of galaxies
- Large-scale N-body simulation of cosmology
- Theory and simulation of planetary formation
- SPH/MHD simulation of star formation
- Direct simulation of gravitational lensing
- Algorithms for N-body simulation
Contact address: Prof. Jun Makino, Department of Astronomy, School of Science, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan
Tel: 81 3 5841 4276  Email: makino@astron.s.u-tokyo.ac.jp
Fax: 81 3 5841 7644  http://grape.astron.s.u-tokyo.ac.jp/iau208/

IAU SYMPOSIUM 209 PLANETARY NEBULAE: THEIR EVOLUTION AND ROLE IN THE UNIVERSE
November 19-23, 2001, Canberra, Australia
Scientific Organizing Committee: Agnès Acker (France), Magda Arnaboldi (Italy), Bruce Balick (USA), Michael Barlow (UK), Shuji Deguchi (Japan), Michael Dopita (Co-chair, Australia), George Jacoby (USA), Sun Kwok (Co-chair, Canada), Walter Maciel (Brazil), Arturo Manchado (Spain), Mario Perinotto (Italy), Stuart Pottasch (Netherlands), Detlef Schönberner (Germany), Yervant Terzian (USA), Silvia Torres-Peimbert (Mexico), Romuald Tylenda (Poland), Peter Wood (Australia)
Chair, Local Organizing Committee: Michael A. Dopita
Principal Topics:
- PN surveys and their distribution in the galaxies
- PN in the scheme of stellar evolution
- Central stars and their atmospheres
- Nebular properties of PN
- PN as galaxy probes
Contact address: Prof. Michael A. Dopita, Research School of Astronomy and Astrophysics, Private Bag, Weston Creek P.O., ACT2611, Australia
Tel: 61 262 49 0212  Email: michael.dopita@anu.edu.au
Fax: 61 262 49 0233

IAU SYMPOSIUM 210 MODELING OF STELLAR ATMOSPHERES
June 17-21, 2002, Uppsala, Sweden
Scientific Organizing Committee: France Allard (France), Kwing Lam Chan (China PR), Henny Lamers (Netherlands), Dimitri Mihalas (USA), Nikolai Piskunov (Sweden), Fiorella Castelli (Italy), Sami Solanki (Germany), Kozo Sadakane (Japan), Javier Bueno Trujillo (Spain), Werner W. Weiss (Chair, Austria)
Chair, Local Organizing Committee: Nikolai Piskunov
Principal Topics:
- 3D hydrodynamic calculations with 3D energy transport
- Convection modeling
- Inclusion of magnetic fields
- Surface structures: Doppler and Zeeman-Doppler imaging
- Vertical structures: stratification by diffusion
- N-LTE radiative transfer
- Dynamic atmospheres: pulsations and winds
- Atomic and molecular data
- Observations
Bring it all together: self-consistent determination of abundances and atmosphere models in Sun and stars
Contact address: Prof. Nikolai Piskunov, Uppsala Astronomical Observatory, Box 515 S-751 20 Uppsala, Sweden
Tel: 46 471 5958  Email: piskunov@astro.uu.se
Fax: 46 471 5999  http://www.astro.uu.se/iau210

4.2. Future IAU Colloquia

IAU COLLOQUIUM 184 AGN SURVEYS
June 18-22, 2001, Byurakan, Armenia
Scientific Organizing Committee: Francesco Bertola (Italy), Brian Boyle (Australia), Richard Green (USA), Guenther Hasinger (Germany), Edward Khachikian (Chair, Armenia), Areg Mickaelian (Armenia), Dieter Reimers (Germany), Brigitte Rocca-Volmerange (France), David Sanders (Co-chair, USA), Govind Swarup (India), Yervant Terzian (USA), Phillipe Véron (France), Daniel Weeman (USA)
Chair, Local Organizing Committee: Areg Mickaelian
Principal Topics:
- Spectral and colorimetric surveys for AGN
- Surveys for UV-excess galaxies
- AGN from IR/submm surveys: IRAS, ISO, SCUBA, SIRTF
- AGN from radio surveys: NVSS, FIRST, and others
- AGN from X-ray surveys: ROSAT, ASCA, BeppoSAX, Chandra, XMM
- AGN statistics and cross-correlation of multiwavelength surveys
- Physics and cosmological evolution of AGN
- Study of unique AGN
- Digital surveys and their advantage
- Future giant projects

Contact address: Dr. Areg M. Mickaelian, Byurakan Astrophysical Observatory, Byurakan 378433, Aragatzotn province, Republic of Armenia
Tel: 374 2 53 2751 Email: aregmick@obs-hp.fr / iauc184@bao.sci.am
http://bao.sci.am/iauc184

IAU COLLOQUIUM 185 RADIAL AND NONRADIAL PULSATIONS AS PROBES OF STELLAR PHYSICS
July 26-31, 2001, Leuven, Belgium
Scientific Organizing Committee: Conny Aerts (Belgium), Tim Bedding (Australia), Mike Berger (Austria), Jørgen Christensen-Dalsgaard (Chair, Denmark), Wojciech Dziembowski (Poland), Joyce Guzik (USA), Steve Kaufer (USA), Eric Michel (France), Ennio Poretti (Italy), Dimitar Sasselov (USA), Hiromoto Shibahashi (Japan), Mike Thompson (UK), Patricia Whitelock (South Africa)
Chair, Local Organizing Committee: Conny Aerts
Principal Topics:
- The importance of pulsating stars as probes of their internal properties
- Hydrodynamic processes
- Stellar pulsations in a broad context
- Stellar pulsations in rotating stars
- Non-linear effect in pulsating stars
- Mass loss in pulsating stars
- The interaction between convection and pulsation
- Asteroseismology from space and from the ground

Contact address: Prof. Conny Aerts, Katholieke Universiteit Leuven, Instituut voor Sterrenkunde, Celestijnenlaan 200 B, B-3001 Leuven, Belgium
Tel: 32 16 327028 Email: conn@ster.kuleuven.ac.be
Fax: 32 16 327999 http://www.ster.kuleuven.ac.be/~iau185/

4.3. Latin-American Regional Meeting

IAU 10TH LATIN-AMERICAN REGIONAL MEETING
September 17-21, 2001, Cordoba, Argentina
Scientific Organizing Committee: Omar Benvenuto (Argentina), Alberto Carramiñana (Mexico), Irene Cruz Gonzales (Mexico), Pierre Kaufmann (Brazil), Diego Garcia Lambs (Chair, Argentina), Hugo Levato (Argentina), Dante Minniti (Chile), Felix Mirabel (Argentina), Miriána Pastoriza (Brazil), Antonio Parravano (Venezuela), Monica Rubio (Chile), Gonzalo Tancredi (Uruguay)
Chair, Local Organizing Committee: Carlos J. Donzelli
Principal Topics:
- Dynamics of the solar system
- Stars; binary systems, supernova progenitors and compact stars
- Solar physics
- Interstellar medium; star formation, stellar ejecta and their interaction with ISM
- Stellar systems; stellar populations, clusters and stellar associations

- Extragalactic astronomy; galaxies, clusters, active nuclei
- High energy astrophysics
- Cosmology; formation and evolution of structure
- Instrumentation

Contact address: Dr. Carlos J. Donzelli, Laprida 854, 5000 Cordoba, Argentina
Tel: 56 41 203092 /204500 Email: charly@oac.uncor.edu
Fax: 56 41 224520 http://axp2.oac.uncor.edu/~xrrla/

5. NEWS FROM DIVISIONS

Division 1: Fundamental Astronomy (Nicole Capitaine)

The IAU Division I Working Groups for the triennium 2000–2003 have now been officially approved by the IAU Executive Committee. Some of these WG are the reappointment or the extension of previous ones and new WG have been formed on the "Redefinition of Universal Time Coordinated (UTC)" (chair: D.D.McCarthy, USA) and on "Future developments in ground based Astrometry" (chair: M. Stavinschi, Romania; co-chair: J. Kovalevsky, France). More information on these WG can be found at http://danof.obspm.fr/iaudiv1/Working_Groups.html Information about Commissions 4, 7, 8, 19 and 31 are also available through the Division I homepage.

The International Earth Rotation Service (IERS), which was created in 1988 by the IAU and the IUGG, has got a new structure since January 1, 2001, corresponding to new Terms of Reference. IERS is now composed of a Central Bureau, six Product Centres, ten Combination Research Centres and the Analysis Coordinator. External services like IGS, ILRS and IVS serve as Technique Centres for the IERS. A new Directing Board has been formed (Chair: Jan Vondrák) and the new web site of the IERS, www.iers.org, provides key information on and links to the IERS and its components. The International VLBI Service for Geodesy and Astrometry (IVS), which was created on 1 March 1999 as a Service of IAG and has been recognised as an IAU Service Organisation at the last General Assembly in Manchester (Resolution B1.1), has now become, in 2001, a new member of the Federation of Astronomical and Geophysical Data Analysis Services (FAGS).

Very relevant to the activities of the Division I is the selection on 13 October 2000 of the GAIA mission as cornerstone 6 of the ESA science program. GAIA will analyze the composition, formation and evolution of our Galaxy by mapping with unprecedented precision one billion stars, and is due for launch no later than 2012. GAIA will reach an astrometric accuracy of 10 microarcseconds for stars brighter than 15th magnitude, together with photometric measurements in the millimagnitude range and a survey of radial velocity down to magnitude 17. Virtually every branch of the astronomical research will be affected by the GAIA results when they are made available around 2017.
Division II: Sun and Heliosphere (Arnold Benz)

The Working Group on Solar and Interplanetary Nomenclature, chaired by Ed Cliver (USA), has started to operate and produced a first essay written by L. Burlaga on magnetic clouds and flux ropes. The aim of the WG is to look into terms of solar and heliospheric physics that are currently being used differently or are ill-defined. Several other essayists have been found who are currently writing about the origins of such terms and their various usages so that scientists can make informed decisions about how to use them properly.

It has been decided to publish such essays in the Web and in EOS, the Journal of the American Geophysical Union. The web files are stored at ETH Zurich for the moment, but a more permanent place will be sought. The essays on Solar Interplanetary Nomenclature can be accessed through the WG address at the IAU web site http://www.iau.org/Organization/divcom/div2.htm.

Division IV: Stars (Beatriz Barbuy)

The Division comprises five Commissions: 26 (Double and Multiple Stars), 29 (Stellar Spectra), 35 (Stellar Constitution), 36 (Theory of Stellar Atmospheres), 45 (Stellar Classification). The Board of Division IV consists of the Past President Lawrence Crum, the President Beatriz Barbuy, and the Presidents of the five Commissions Colin D. Scarfe (26), Gautier Mathys (29), Don A. VandenBerg (35), Dainis Dravins (36) and Tom H. Lloyd Evans (45).

Working Groups under Division IV are under rearrangements.

Division VII: Galactic System (Georges Meylan)

Division VII currently has a web site, reachable via the general IAU web page http://www.iau.org/. It contains some information on future IAU activities and on the two constituent Commissions (33: Structure and Dynamics of the Galactic System and 37: Star Clusters and Associations).

The Board elected at Manchester consists of: Gary Da Costa (past President Comm. 37), Ken Freeman (past President Div. VII), Georges Meylan (President Div. VII), Ata Sarajedini (vice-President Comm. 37), David Spergel (President Comm. 33), Patricia Whitelock (vice-President Comm. 33).

Future activities: Please keep us informed about meetings, initiatives, and whatever you are involved in or know about, and we shall try to reciprocate. Quite a few members of Division VII have no or wrong email address. Please, check your addresses on the Online Membership Directory on the IAU web page at: http://www.iau.org/cgi-iau/iau_mem.cgi and if necessary, send your updated coordinates to the secretariat at iaupdate@iap.fr, otherwise you will remain unreachable.

6. COMMISSION MATTERS

5.1. Address Updates of Presidents and Vice-Presidents 2000–2003

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<th>Comm.</th>
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<td>5</td>
<td>Documentation &amp; astronomical data/ Documentation &amp; données astronomiques</td>
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<td>Astronomical telegrams/Télégrammes astronomiques</td>
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| 10   | Solar Activity/Activité solaire                       | Solar Activity/Activité solaire                       |
|      | Arnold O Benz                                         | Donald B. Melrose                                     |
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| Fax  | 41 1 632 12 05                                        |                                                       |

|      | Sami K. Solanki                                        | Thomas Bogdan                                         |
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| Fax  | 49 5556 979 190                                       | 1 303 497 1589                                        |

| 14   | Atomic & Molecular Data/Données atomiques & moléculaires | Atomic & Molecular Data/Données atomiques & moléculaires |
|      | Peter L. Smith                                         | Sverenie Johansson                                    |
|      | Harvard Smithsonian CfA                                | Physics Dpt                                            |
|      | MS 50                                                  | Univ of Lund                                           |
|      | 60 Garden St                                           | Sölvegatanan 14                                        |
|      | Cambridge MA 02138-1516 USA                            | S 223 62 Lund, Sweden                                  |
| Phone| 1 617 495 4984                                         | 46 46 12 6097                                          |
| Fax  | 1 617 495 7455                                         | 46 46 222 4709                                        |

| 15   | Physical Study of Comets & Minor Planets/              | Physical Study of Comets & Minor Planets/              |
|      | Etude physique des comètes & des petites planètes     | Etude physique des comètes & des petites planètes     |
|      | Horst Uwe Keller                                       | Edward F. Tedesco                                      |
|      | MPI Aeronomie                                          | TerraSystems Inc                                       |
|      | Max Planck Str 2                                       | Space Sci Res Div                                     |
|      | D 37191 Katlenburg-Lindau Germany                      |                                                      |
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| Fax  | 49 5556 979 141                                       | 1 603 659 2982                                       |

| 16   | Physical Study of Planets & Satellites/                | Physical Study of Planets & Satellites/                |
|      | Etude physique des planètes & des satellites           | Etude physique des planètes & des satellites           |
|      | Dale P. Cruikshank                                     | Regis Courtin                                          |
|      | NASA ARC                                               | Observatoire Paris,                                   |
|      | MS 245-6                                               | Section Meudon, DESPA                                  |
|      | Moffett Field CA 94035-1000                            | PI J Jansen                                            |
| Phone| 1 415 604 4244                                         | 33 1 45 07 7729                                       |
| Fax  | 1 415 604 6779                                         | 33 1 45 07 7469                                       |

| 19   | Rotation of the Earth/Rotation de la Terre             | Rotation of the Earth/Rotation de la Terre             |
|      | Nicole Capitaine                                       | Véronique Dehant                                       |
|      | Observatoire de Paris                                  | Observatoire Royal                                     |
|      | OBSERVATOIRE ROYAL                                     | de Belgique                                            |
|      | 61 Av Observatoire                                     | Av Circulaire                                          |
|      | F 75014 Paris, France                                  |                                                       |
| Phone| 33 1 40 51 2231                                        | 32 2 373 0266                                         |
| Fax  | 33 1 40 51 2291                                        | 32 2 374 9822                                         |

| 20   | Positions & Motions of Minor Planets, Comets & Satellites/ | Positions & Motions of Minor Planets, Comets & Satellites/ |
|      | Positions & mouvements des petites planètes, des comètes & des satellites | Positions & mouvements des petites planètes, des comètes & des satellites |
|      | Edward L.G. Bowell                                     | Giovanni B. Valsecchi                                  |
|      | Lowell Observatory                                     | IAS                                                    |
|      | 1400 W Mars Hill Rd                                    | Rep Planetologica                                      |
|      | Flagstaff AZ 86001                                     | via Fosso del Cavaliere 100                            |
| Phone| 1 520 774 3358                                         | I 00133 Roma, Italy                                    |
| Fax  | 1 520 774 6296                                         | 39 06 4993 4446                                       |

<p>| 21   | Light of the Night Sky/Lumière du ciel nocturne        | Light of the Night Sky/Lumière du ciel nocturne        |
|      | Philippe Lamy                                          | J. Mayo Greenberg                                      |
|      | Lab Astronomie Spatiale                                | R &amp; B Sackler Lab for Astrophysics                     |
|      | BP 8                                                  | Leiden Observatory                                    |
|      | F 13376 Marseille Cdx 12                               | Box 9513                                              |
| Phone| 39 06 2066 0188                                        |                                                       |
| Fax  | 39 06 2066 4446                                       | 39 06 2066 0188                                       |</p>
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35 Stellar Constitution/Constitution des étoiles
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A total of 213 IAU Circulars were published in 2000, down from the 261 published in 1999. The most popular topics covered were supernovae, which were mentioned on 71 percent of the Circulars, and comets, mentioned on 52 percent of the Circulars. These were followed by items involving γ-ray and x-ray transients (25 percent of the year’s IAUCs) and novae and other unusual galactic variable stars (23 percent).

There were 173 new supernova discoveries made in 2000 that were reported on IAUCs. The 2000 designations of extragalactic supernovae represents the second highest number of supernovae in a calendar year (the record year 1999 having some two dozen more). In addition, six supernovae found on images taken in previous years were announced and designated on IAUCs in 2000. No known supernovae became brighter than visual mag 14 during the year.

During the year, 87 comets received new 2000 designations, which are announced traditionally on the IAUCs. This figure does not include 2000 designations that have been announced during the first quarter of the year 2001 to another 26 SOHO comets that were found belatedly in 2000 data, as well as a comet recovery (P/2000 Y10 = P/1992 G3) and to a November 2000 discovery of an apparently asteroidal object that was found in February 2001 to be cometary (P/2000 WT168). Four additional objects reported in 1999 as asteroidal (and given minor-planet designations then) were found to be cometary in early 2000 and announced as comets on IAUCs during 2000 (C/1999 XS 87, P/1999 WJ7, P/1999 XB 69, and P/1999 XN 20. And the long-awaited rediscovery of the final ‘lost’ minor planet, (719) Albert, was announced on May 9 (IAUC 7420). Seven additional IAUCs during the year contained items regarding other interesting minor planets (and companions or satellites to three such objects). The recoveries (or rediscoveries) of eight short-period comets (including 97P/Metcalf-Brewington in September) were also announced on IAUCs in 2000. Comet P/1963 W1 = 1963 IX, discovered by Anderson but lost since November 1963 (P = 7.9 yr), was rediscovered by the LINEAR survey in September 2000.

Numerous amateur astronomers were actively involved in searching the Solar and Heliospheric Observatory spacecraft’s coronagraph images at the SOHO website, and 118 new comets detected prior to 2000 were announced on IAUCs published during 2000. Due to this large number, it was proposed and accepted at the Commission 6 meeting in Manchester (August 2000) that older SOHO comets could henceforth be announced immediately on Minor Planet Electronic Circulars, with summary listings given later on IAUCs after several SOHO comets could be collected for tabulation therein.

There were no really bright comets in 2000, though comet C/1999 S4 (LINEAR) brightened to total visual mag 6-7 in July before unexpectedly breaking apart and disappearing from view in August. Comets 2P/Encke and C/2000 W1 (Utsumoniyaji-Jones) reached similar brightness in September and December, respectively (with magnitude estimates given occasionally on IAUCs to aid observers). Only one comet...
was discovered visually during 2000-C/2000 W1; for this discovery, amateur astronomers Syogo Utsunomiya and Albert Jones qualify as the only recipients of the Edgar Wilson Award during the calendar year 2000. The Edgar Wilson Award for the year 1999–2000 was announced on June 29 (IAUC 7445). Despite the incentives of that Award, visual discoveries of comets continue to decline, probably due to a combination of the effects of the CCD surveys for near-earth objects that now net dozens of comet discoveries each year and of increasing light pollution worldwide.

There were also reports of two new Galactic novae (V4642 Sgr and V463 ScI), of one nova in the Large Magellanic Cloud, and of five novae in other nearby galaxies. Continuing a collaboration begun a couple of years ago between the CBAT and IAU Commission 27, N.N. Samus supplies new variable-star designations for novae to be announced on IAUCs, so that the permanent designations can be used almost immediately. The new X-ray nova XTE J1118+480 (for which an optical candidate was identified that reached visual mag 13) tallied the most reports among such objects, with information appearing on a dozen IAUCs during the year.

The decline in the number of 768 bursters mentioned on the IAU Circulars continued in 2000, as information on these events is being given in the GCN service of NASA’s Goddard Space Flight Center. As noted by Marsden in the CBAT report for 1999, this is reasonable, given that this service disseminates the communications - errors and all - automatically, in contrast to the verification and editing that has traditionally been associated with the publication of the IAU Circulars.

Sixteen IAUCs during the year covered the discoveries or rediscoveries and follow-up information for three satellites of Uranus (first observed in 1999), two satellites of Jupiter (one first observed in 1999 and the second a rediscovery of the lost object S/1975 J 1), and twelve satellites of Saturn.

The number of paid subscribers to the printed edition of the IAU Circulars has continued to fall, from 267 at the end of 1999 to 235 at the end of 2000 (the latter number including 83 within North America and 152 outside of North America). In addition, there were 39 free (complimentary or exchange) subscriptions to the printed IAUCs at the end of 2000. The reduction in the number of paid subscribers to the e-mail version via the Computer Service that is shared with the Minor Planet Center is implicit in Marsden’s report of the latter.

As in recent years, most of the Circulars in 2000 were prepared by the undersigned, with backup from Marsden, from Minor Planet Center Associate Director Gareth Williams (who is routinely responsible for the Bureau’s presence on the WWW), and from Carl W. Hergenrother (University of Arizona) and Elizabeth O. Waagen (American Association of Variable Star Observers) - these last two helping with CBAT and MPC functions while Marsden, Williams, and the undersigned attended the IAU General Assembly in August. Muazzez Lohmiller has efficiently taken care of the accounts, addressing of envelopes and other administrative matters.

This is my first annual report as Director of the Central Bureau for Astronomical Telegrams (having served as Associate Director since 1988, and as Assistant Director from 1981). At the IAU General Assembly in Manchester, I succeeded Brian G. Marsden in this position; after serving since 1968 as CBAT Director, Marsden was selected Director Emeritus and President of Commission 6. I take this opportunity to thank Marsden for his advice and encouragement over more than two decades in my own work with the CBAT. I look forward to continuing my service for the astronomical community and especially my involvement with the astronomers who obtain the important observations to which the CBAT attends.

Daniel W. E. Green, Director of the Bureau

Commission 20: Annual Report 2000, Minor Planet Center

The year 2000 was again a record year for Minor Planet Center activity. The number of new numberings of minor planets was 6939, more than 2.2 times the total in 1999. The number of pages of Minor Planet Circulars (MPCs), 4432, was only 12 percent higher than in 1999, but to this it is necessary to add the 7670 pages of the Minor Planet Circulars Orbit Supplement (MPOs), a new series, paginated but not issued in printed form, inaugurated in May to relieve pressure on the MPCs themselves, which are issued in printed form. The orbital information on minor planets in the MPC is now restricted to a summary of the numberings, including full-precision orbital elements (but no residuals) and a listing of new identifications. It is hoped that the number of MPCs issued in 2001 will therefore be significantly smaller than in the past couple of years. In addition, the actual astrometric observations of minor planets are contained in the Minor Planet Circulars Supplement (MPSs), of which the year 2000 saw 15142 pages, some three times the total in 1999.

The maximum subscriber used for the provisional designations in a single halfmonth, which exceeded 100 for the first time in 1998 and 200 in 1999, exceeded 350 in the second half of October 2000 - at least for the observations published by March 2001. Already by the end of 2000 the last designation used in that halfmonth was up to SV346, while that in the first half of October 1999 was up to TG323.

The total of Minor Planet Electronic Circulars (MPECs) issued was 1206, 27 percent more than in 1999. Of these, 300 were “Daily Orbit Update” (DOU) issues listing the new orbits computed and identifications found. The maximum number of MPECs during a single halfmonth was 71 in the second half of September. The Apr. 7 DOU contained a record 6553 new orbits, computed during the previous 24 hours. A record 352 new near-earth objects (NEOs) -or, more specifically, near-earth asteroids- were discovered during the year, and “The NEO Confirmation Page” was again an important tool for ensuring that candidate NEOs are confirmed and followed up. Of these 352 NEOs, 74 are defined as potentially hazardous asteroids (PHAs), a more useful subset when it comes to considering objects that might conceivably collide with the earth. As many as 58 of the year’s PHAs were found by the LINEAR program of the Massachusetts Institute of Technology. Altogether, this program has yielded 132 of the total of 284 PHAs.

At the opposite extreme, the year produced the discoveries of 158 new transneptunian objects and centaurs, bringing the total to 431. Of this total, just half have been observed at two or more oppositions. Beginning with (15760) 1992 QB1, the first of the “cubewanos”, 16 of the transneptunian objects were judged to have orbit determinations accurate enough to qualify for numbering.
A particular highlight of the year was the identification, by Minor Planet Center Associate Director Gareth Williams in May, of (719) Albert among observations from the University of Arizona’s Spacewatch program. This NEO was the last of the ‘lost’ numbered minor planets, knowingly observed previously only in 1911. Following the rediscovery, images of (719) were also recognized on single nights in 1971, 1988, 1993 and 1997.

Early in the year the decision was made to publish in the MPCs observations of the outer satellites of the giant planets. Although the principal motivation for this was the fact that it had been practicable to publish in the IAU Circulars only a small selection of the observations of the new Uranian satellites discovered in 1997 and 1999, the move also makes a lot of sense, given that many of the observations of the brighter satellites have routinely been reported to the Minor Planet Center as observations of unidentified minor planets. The timeliness of this decision, which also involved the publication of orbital elements, became evident with the announcement later in the year of the discoveries of no fewer than 12 new outer satellites of Saturn, as well as of new outer satellites of Jupiter.

The number of subscriptions to the printed MPCs showed a general decrease from 193 to 173 during the year, and that to the Computer Service (shared with the Central Bureau for Astronomical Telegrams) generally decreased from 550 to 510. The number of subscribers to the Extended Computer Service fluctuated between 61 and 67. Given these reductions, financial support from a contract with the U.S. National Aeronautics and Space Administration is very much appreciated, and this allowed the addition of Tim Spahr to the staff of the Minor Planet Center in May. Williams and Spahr together have made great inroads on the problem of performing automatic night-to-night linkages of unidentified main-belt minor planets, not only in a single observing program, but also between one program and another. This important work has greatly reduced the number of the otherwise rather useless “one-night stands” remaining in the Minor Planet Center’s files.

A second, very welcome gift from the Tamkin Foundation permitted the acquisition of another, faster computer and its incorporation into the computer cluster established in 1999. Williams has continued to refine and otherwise improve the now very extensive system of software used in the Minor Planet Center’s work, and it has in fact been possible to accommodate the tripling of the rate of data acquisition on minor planets during the past two years. Syuichi Nakano has continued to be the “Liaison in Japan”, and Susan Russell has provided pro bono service editing the citations for new namings of minor planets. Muazzez Lohmiller was again responsible for the accounts and mailings, and Billy Duggan oversaw the printing, collating and stapling of the MPCs in the SAO’s print shop.

Brian G. Marsden, Director, Minor Planet Center

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Atomic Spectra & Wavelengths
C 14

Atomic Transition Probabilities
C 14

Collision Processes
C 14

Line Broadening
C 14

Molecular Structure
C 14

Molecular Reactions on Solid Surfaces
C 14

Comets
C 15

Minor Planets
C 15

High-Frequency & Sudden Variations in Earth Orientation
C 19

Precession-Nutation
C 19

Comets & Distant Objects
C 20

Natural Satellites
C 20

MPC Advisory Committee
C 20

Amateur-Professional Co-Operation in Meteors
C 22

Infrared Astronomy
C 25

Hot Massive Stars
C 29

Radial-Velocity Standard Stars
C 30
8. 75th MEETING OF THE EXECUTIVE COMMITTEE

The 75th Meeting of the EC will take place on June 14 – 15, 2001 at the Astronomical Observatory, University of Copenhagen, Denmark, at the invitation of former General Secretary J. Andersen. Major items on the agenda will be the preparations for the XXVth GA, including preliminary planning of the scientific program, and the selection of IAU sponsored meetings in 2002. Other topics for discussion include astronomical publishing and abstracting services, updates to the Rules for Scientific Meetings, and new initiatives for increasing the visibility of the IAU to the outside world as well as its usefulness for the younger members and astronomers at large.

9. XXVth AND XXVIth GENERAL ASSEMBLIES

9.1. Report on the Planning of the IAU XXVth General Assembly

The National Organising Committee for IAU 2003 has held two meetings since the last report, in November 2000 and March 2001. As is well known the Assembly is scheduled to take place at the Sydney Convention Centre at Darling Harbour in Sydney, Australia from July 13 – 26, 2003. Work is in progress to determine the number and sizes of rooms at the centre for which firm bookings need to be made. All scientific and business sessions will be scheduled within the Convention Centre complex. The Committee is looking forward to the visit of the Secretary General in mid April, where he will examine the venue and other arrangements which have been made or are proposed.

Minor modifications have been made to the logo for the assembly to make it more effective. A number of sub-committees have now been established, although there is still some difficulty getting senior persons to take on the responsibility of chairing some of the most important of these. The Associated Events Sub-Committee has moved very swiftly to ensure that there will be a number of exciting scientific and/or cultural events associated with the Assembly which will bring prominence to the congress.

The NOC has authorised the tentative booking of some 600 beds in College accommodation at Sydney University, as well as a similar number in a variety of hotels and apartments in the Darling Harbour vicinity.
9.2. IAU XXVIth General Assembly

The National Organizing Committee for the 26th IAU General Assembly in Prague 2006 has been formed and approved by the Czech National Committee for Astronomy. Its composition is as follows:

Jiří Bičák (Institute of Theoretical Physics, Charles University Prague);
Jiří Grygar (Institute of Physics, Academy of Science, Prague);
Petr Hadrava (Astronomical Institute, Academy of Sciences, Ondřejov);
Petr Heinzel (Astronomical Institute, Charles University Prague);
Vladimír Karas (Astronomical Institute, Charles University Prague);
Zdeněk Mikulašek (Dept. of Theoretical Physics & Astrophysics, Masaryk University Brno);
Jan Palouš (Chair, Astronomical Institute, Academy of Sciences, Prague);
Martin Šolc (Astronomical Institute, Charles University Prague);
Jan Vondrák (Vice-Chair, Astronomical Inst., Academy of Sciences, Prague);
Marek Wolf (Astronomical Institute, Charles University Prague).

The competition for the selection of the Conference Agency that will manage the General Assembly has been declared, and the result is expected during May 2001.

April 10, 20001
Jan Palouš, Jan Vondrák

10. EDUCATIONAL ACTIVITIES

10.1. Report on the 25th International School for Young Astronomers (ISYA)

This 25th ISYA took place in Thailand at the University of ChiangMai, January 3 – 22, 2001. All the lectures and practical activities were at the Department of Physics (Faculty of Sciences) and the observations at the Sirindhorn Observatory.

This ISYA could be organized due to the long standing efforts of Prof. B. Soonthornthum (ChiangMai University). The Local Organizing Committee was very efficient due to the active participation of a group of Faculty members from the Department of Physics of ChiangMai University. Prof. Kam Ching Leung (University of Nebraska-Lincoln, USA) also took very active part in the local organization.

Funding for this ISYA was provided, from the international side, by IAU, UNESCO and ICSU. From the Thai side, besides the support given by the Department of Physics of the ChiangMai University, several institutions also supported this ISYA: National Science and Technology Development Agency, the Institute for Promotion in Teaching Science and Technology and the Science Society of Thailand, as well as EGGO (Electricity Generating Public Company Limited).

36 participants attended the ISYA, 19 from Thailand (3 women, 16 men) and 17 from the Asian region [China (mainland): 2 (men), Hongkong (China): 1 (man), Taiwan: 1 (man), India: 3 (men), Indonesia: 3 (1 woman, 2 men), Laos: 1 (man), Nepal: 1 (man), Philippines: 3 (men), Vietnam: 2 (women)]. The faculty members were:

Helmut A. Abt (USA - Stellar physics)
Kwing L. Chan (Hong Kong - Solar type atmospheres)
Kwong-Sang Cheng (Hong Kong - Stellar high energy astrophysics)
Jean-Pierre De Greve (Belgium - Stellar structure, evolution of binary stars)
Michele Gerbaldi (France - Stellar atmospheres)
Ajit Kembhavi (India - Galaxies)
Kam Ching Leung (USA - Binary stars)
Sumit Niparaks (Thailand - Stellar observations)
Nuanwan Sanguansak (Thailand - Stellar dynamics)
Aniwat Sooksawat (Thailand - Practical astronomy)
Boonrucksar Soonthornthum (Thailand - Binary stars)
Donald W. Kurtz (Great Britain - Variable stars, stellar pulsations)

Beside the lectures, several sessions were devoted to practical activities with computers. Sessions on stellar photometry data reduction and image processing took place, as well as specific analysis of the contents of some astronomical data bases.

Several observing sessions were organized at the Sirindhorn observatory using the two telescopes: the 40cm, Cassegrain type and the 50cm Ritchey-Chrétien type. The first one is equipped with a spectrograph and a CCD; some of the spectra thus taken were used for practical activities. During this ISYA half the participants gave short talks on their current research work.

Several institutions or universities from which the participants came have a small telescope. Lively discussions took place, with the faculty members, on which useful observational programmes can be developed in the stellar observational field.

Michele Gerbaldi
Chairperson for the ISYA
10.2. Teaching for Astronomy Development (TAD) Report

**Vietnam:**
The new bilingual text ‘Astrophysics’ received a final editing for scientific correctness and was published in December 2000. The university teachers now using the text received teaching support at a conference in March 2001. The conference was also used to plan the broadening and increase the influence of astronomy in Vietnam, including a newly approved astronomy course for science-oriented high schools. The first issue of the new quarterly Vietnamese journal ‘Popular Astronomy’ was published by the Astronomical Society of Vietnam in December 2000. A part is translated from ‘Universe in the Classroom’ (Astronomical Society of the Pacific). The only Vietnamese planetarium, in Vinh City, obtained two new shows (one donated) from Davis Planetarium (Baltimore, USA), translated and culturally adapted them with help from Vinh University astronomers, and started showing them in January 2001. A member of the astronomy faculty of the Pedagogical Institute of Hanoi attended the UN/ESA workshop in Toulouse and received some training under auspices of the Société Populaire Astronomique de Toulouse as a beginning to enhance the use of the Hanoi telescope. TAD provided educational materials for current and planning of future activities, and, to plan future activities, supported the travel of Prof. Nguyen Dinh Huan (vice-president, Astronomical Society of Vietnam) to the IAU General Assembly.

**Morocco:**
TAD provided books, slides, and equipment needed for the astronomy educational program and aided the computational capability of Prof. Chamcham’s academic program, partly via an interdisciplinary collaboration with the University of Pisa.

Donat Wentzel
Chair for Teaching for Astronomy Development (TAD)

10.3. Report on the Activities of Commission 46

After merging Commission 46 with Commission 38, Exchange of Astronomers, and the Working Group on the Worldwide Development of Astronomy, its activities have rather good harmony. The Programme Group (PG) on Solar Eclipses tries to perform public education during each specific total solar eclipse. When a developing country wants to have a consultant, the PG on Advance Development sends one or two specialist(s) to that country to instruct them. Then, the PG on Teaching for Astronomy Development provides extensive lecture courses within that country. When the country can stand by itself, it may hold an ISYA with attendance of graduate students and young astronomers from countries nearby. If those countries need necessary books and journals, the PG on Exchanges of books, journals, etc. will be able to help them.

However, to proceed further, astronomers in each developing country need to stay for longer periods at some astronomical institute and also have observational instruments. Since these need a large budget, it is outside our capacity.

11. RELATIONS TO OTHER ORGANIZATIONS

11.1. COPUOS Scientific and Technical Subcommittee

The UN Committee for the Peaceful Uses of Outer Space (COPUOS) invited IAU, ITU and OECD to make presentations on the regulatory mechanisms in radio astronomy to the Scientific & Technical Subcommittee at its meeting in Vienna on 12-23 February, 2001. This session took place on February 15, when speakers were Drs. A. Nalbandian on behalf of ITU (“The radio astronomy service and the current spectrum environment”) and Klaus Ruf for the IAU (“Radio astronomy and communication satellites: How can they share a limited natural resource?”). Both talks were well received. Together, they highlighted what happens when ITU regulations or recommendations are not followed.

During a COSPAR/IAF Symposium on “Terrestrial Hazards from Outer Space Objects and Phenomena”, held in the same room Feb. 12-13, Comm. 50 Pres. Jim Cohen spoke on “Maintaining a clear sky—effects of space activities on radio astronomy”, and OS Hans Rickman on “Collision hazards from Near Earth Objects”. The undersigned was asked to summarise the Symposium on behalf of COSPAR, and also read an official statement on behalf of the IAU, which outlined the broader environmental perspective.

As an unexpected windfall, the US delegation announced that Congress had passed a law banning, in quite sweeping terms, all "Obtrusive space advertising" (i.e., visible from the ground with the naked eye), and instructed the President to initiate negotiations towards international agreement to the same end. I of course strongly applauded this initiative and promised the technical and moral support of the IAU.

Johannes Andersen
IAU Representative to UN/COPUOS S & T Subcommittee

11.2. Meeting of ICSU’s International Scientific Unions

This meeting, held in Paris, February 18-20, 2001, was arranged with the aim to strengthen the cooperation between the umbrella organization ICSU and its currently 26 Scientific Unions, as well as between the Scientific Unions. ICSU’s Interdisciplinary Bodies were invited to take part during the second day of the meeting.
The International Astronomical Union encompasses every scientific branch of astronomy and astrophysics, in comparison to such as the biological, medical and earth sciences that have established several Scientific Unions to deal with more specialized sectors within their fields.

A key topic of the meeting was the concern and need for capacity building in science. The current experience of the various Unions seemed useful to update and improve the ISCU programs aiming to promote capacity building in member countries where such help is needed and wanted.

Another issue of concern is the free access to scientific data, which also ties in with the topic above. ICSU is actively seeking the good cooperation of governments world wide on this matter.

In a separate session of Unions and Organizations for Earth and Space Sciences (IAU, IUGG, IUS, URSI, SCOSTEP and SCOWAR) one discussed and agreed on high priority issues where good cooperation is urgent and essential. Such inter-union cooperative programs are (1) Water and Resources, (2) Energy Resources, (3) Natural Disasters and Sustainability, and (4) Climate Variability.

Oddbjorn Engvold
IAU Representative to ICSU

11.3. Proposals for ICSU Grants in 2002

The member Unions of the International Council for Science (ICSU) were able to apply for ICSU Grants for 2002 by 31 March, 2001. Such grants were available in two categories, depending on the proposed amount. A new feature with respect to earlier occasions is that it was now necessary for each applicant to be backed by at least one other Union as supporting applicant.

Priority themes identified by ICSU were: Science and Technology for Sustainable Development, Capacity Building and Science Education, Science/Policy Interface, Dissemination of Information on Science and Technology and Emerging Science and Technology—Creation of New Knowledge. The IAU submitted an application together with COSPAR, dealing with Science Development and Capacity Building in Latin America. This would provide crucial help for a planned ISYA in Argentina in 2002, as well as a follow-up programme providing assistance and education in order for several Latin American countries to build up a capacity for teaching astronomy and space sciences at both universities and primary/secondary schools. That project would run in parallel with, and as a useful complement to, any efforts developed at the UN Centre for Space Science at INPE in Brazil, which would focus more on technical and engineering skills.

The IAU also supported a proposal by IUPAP, the International Union for Pure and Applied Physics, for ICSU to fund an international conference on "Women in Physics", and moreover expressed its appreciation of the FAGS activities in support of their application for an ICSU Grant.

### 12. MEMBERSHIP

#### 12.1. Updated Membership Statistics (as of March 28, 2001)

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<th>Associate Member Country</th>
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**TOTAL**                  **8594** | **98.9** | **1041** | **12.1** | **87.9**

* CAAA: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua & Panama

**12.2. Deceased Members**

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 87.

- A Noel Argue
- Christian Friedemann
- Richard F Barrow
- Karl-Heinz Gebler
- Alfred Bohrmann
- Heinz Herold
- Vladimir Dermendjiev
- Kaj Å Strand
- Jean Delhaye
- Minoru Oda
- Reuven Ramaty
- Peter Dobronravin
- W Wenzel
- Johannes Richter

**12.3. Address Updates Needed for IAU Members or Consultants!**

- David Adams
- Mustafa Akyol
- Ruben Aldrovandi
  - Astronomy Dpt
  - Inst Fisica Teorica
  - Leicester, UK
  - Konya, Turkey
  - Sao Paulo, Brazil

- Paul Atherton
- Vladimir Belinsky
- Kenneth Bell
  - Queensgate Instruments
  - Landau Inst Theor Physics
  - Berkshire, UK
  - Moscow Russia
  - Appl Maths/Theor Phys
  - Belfast, UK

- Steven Bell
- Chris Benn
- Rajaram Bhonsle
  - Royal Greenwich Observ
  - Royal Greenwich Observ
  - Cambridge, UK
  - Santa Cruz, Spain
  - PRL
  - Ahmedabad, India

- Cetin Bolcal
- Patrice Bouchez
- Dennis Butler
  - Physics Dpt
  - ESO
  - Venezcue"er Turkey
  - Santiago, Chile
  - Astronomy Dpt
  - New Haven CT, USA

- Lihong Cao
- Miriam Centurion Marin
- Zhen Chen
  - Purple Mountain Observ
  - Purple Mountain Observ
  - Nanjing, China PR
  - La Laguna, Spain
  - Nanjing, China PR
K Rao
S Jose dos Campos, Brazil

Newrick Reay
Astrophysics Gr
London, UK

J Salisbury
US Geological Survey
Reston VA, USA

D Schulte
ITEK Corp
Lexington MA, USA

John Scott
Steward Observ
Tucson AZ, USA

John Simmons
Glasgow, UK

Joao Steiner
INPE
S Jose dos Campos, Brazil

Jose Taborda
Fac of Sciences
Lisboa, Portugal

Valery Terebizh
Crimean Astrophys Observ
Crimea, Ukraine

Fu Tong
Purple Mountain Observ
Nanjing, China PR

Mo Tsao
Taipei, China R

Rene van der Borgh
Surfers Paradise, Australia

Theophile Weimer
Observ
Paris France

M Rao
PRL
Ahmedabad, India

Lorna Richardson
Dpt Phys/Astronomy
Glasgow, UK

A Schlueter
MPI Plasmaphysik
Garching, Germany

Rolf Schulz
RAIUB
Bonn, Germany

Michael Shallis
Astrophysics Dpt
Oxford, UK

R Speer
Physics Dpt
London, UK

Leif Svalgaard
Ulbek, Belgium

J Tavares
Coimbra, Portugal

Charalambos Terzides
Astronomy Lab
Thessaloniki, Greece

Latif Topkatas
KACST
Riyadh, Saudi Arabia

Walter Upson
Princeton Univ Observ
Princeton NJ, USA

Th Walraven
South Africa

Peter Wellmann
Inst Astron/Astrophysik
München Germany

Christopher Rapley
Mullard Space Sci Lab
Dorking, Surrey UK

Christopher Rogers
DRAO
Penticton BC, Canada

Stephen Schoolman
Lockheed Palo Alto Res
Palo Alto CA, USA

Eugene Scott
NASA GSFC
Greenbelt MD, USA

Eric Silverberg
Fort Davis TX, USA

Christopher Stagg
Mount Royal College
Calgary, Canada

Peter Sweet
Dept of Physics/Astron
Glasgow, UK

Yoichi Terashita
Kanazawa Techn Inst
Ishikawa, Japan

Yves Thiry
Université Paris VI
Paris, France

Eleonore Treffitz
München Germany

E Upton
Dpt Astronomy/Phys
Los Angeles CA, USA

Gilbert Weill
Spot Image Corp
Reston VA, USA

Richard Wilson
CFA
Cambridge MA, USA

S Wilson
Mathematics Dpt
Singapore

Shoichi Yamada
MPE
Garching, Germany

Er-Ho Zhang
Astronomy Dpt
Austin TX, USA

S Wilson
Mathematics Dpt
Singapore

Liangyun Xie
Inst Geodesy
Wuchang, China PR

Jun-ichi Yokoyama
YITP Theoretical Physics
Uji, Japan

Shouzong Zhang
New York NY, USA

13. PUBLICATIONS

IAU Symposia

198 THE LIGHT ELEMENTS AND THEIR EVOLUTION
L. da Silva, M. Spite & J.R. de Medeiros,
Astronomical Society of the Pacific, San Francisco CA, USA, 2000
ISBN 1-58381-048-X (HB) USD $52.00

IAU Colloquia

175 THE BE PHENOMENON IN EARLY-TYPE STARS
M.A. Smith, H.F. Henrichs & J. Fabregat
Astronomical Society of the Pacific, San Francisco CA, USA, 2000
ISBN 1-58381-045-5, (HB) USD$52.00

Other Publications Received

ASP Conference Series, San Francisco, CA, USA, $ 52.00

212 FROM GIANT PLANETS TO COOL STARS
C. Griffith & M. Marley, ISBN 1 58381 041 2 (HB)

213 BIOASTRONOMY '99: A NEW ERA IN BIOASTRONOMY
G. Lemarchand & K. Meech, ISBN 1 58381 044 7 (HB)

215 COSMIC EVOLUTION AND GALAXY FORMATION: STRUCTURE, INTERACTIONS AND FEEDBACK
J. Franco et. al., ISBN 1 58381 046 3 (HB)

216 ASTRONOMICAL DATA ANALYSIS SOFTWARE AND SYSTEMS IX
N. Manset, C. Veillet & D. Crabtree, ISBN 1 58381 047 1 (HB)

217 IMAGING AT RADIO THROUGH SUBMILLIMETER WAVELENGTHS
J. Magnum & S. Radford, ISBN 1 58381 049 8 (HB)
14. OTHER MEETINGS ON ASTRONOMICAL TOPICS

The following is an incomplete list of major meetings in 2001 and 2002 spanning a broad range of topics. More detailed information about these meetings is obtained from the respective contact persons and/or URL addresses. A more exhaustive list can be found on the IAU web site at http://www.iau.org/Activities/meetings/othermeet.html.

TRACING COSMIC EVOLUTION WITH GALAXY CLUSTERS
July 3 - 6, 2001, Sesto Pusteria, Bolzano, Italy.
Contact: S.Borgani, G. Giuricin, M. Mezzetti, Dipartimento di Astronomia, Universita di Trieste, via Tiepolo 11, I-34131 Trieste Italy.
Tel: 39 040 3199 227 Fax: 39 040 3094 18
Email: sesto@daut.univ.trieste.it http://www.daut.univ.trieste.it/Sesto

FIFTH BIENNIAL HISTORY OF ASTRONOMY WORKSHOP
July 5 - 8, 2001, Notre Dame, Indiana, USA.
Contact: Dr. Steven J. Dick, U.S. Naval Observatory, 3450 Massachusetts Ave NW, Washington, DC 20392-5420, USA.
Tel: 1 202 762 0379 or 1 219 631-5000 Fax: 1 202 762 1489 http://www.nd.edu/histast4
Email: dick.steve@usno.navy.mil

THE HIGH-ENERGY UNIVERSE AT SHARP FOCUS: CHANDRA SCIENCE
July 16 - 18, 2001, St. Paul, Minnesota, USA.
Contact: James White, The Astronomical Society of the Pacific, 390 Ashton Avenue, San Francisco, CA. 94112, USA.
Tel: 1 415 337 1100 Fax: 1 415 337 5205
Email: directory@aspsky.org http://www.aspsky.org/meetings/science2001.html

STATISTICAL CHALLENGES IN MODERN ASTRONOMY III
July 18 - 21, 2001, Penn State University, Reading PA, USA
Contact: Eric Feigelson, Penn State University, 525 Davey Laboratory, University Park, PA 16802, USA.
Tel: 1 814 865 0162 Fax: 1 814 868 3399
Email: edf@astro.psu.edu http://www.astro.psu.edu/SCMA

THE LOWEST-MASS GALAXIES AND CONSTRAINTS ON DARK MATTER
July 29 - August 4, 2001, Ringberg Castle, Germany.
Contact: Eva K. Grebel, Max-Planck Institute for Astronomy, Königstuhl 17 D-69117 Heidelberg, Germany
Tel.: 49 6221 528 225 Fax: 49 6221 528 246
Email: grebel@mpia-hd.mpg.de

THE 12TH CAMBRIDGE WORKSHOP ON COOL STARS, STELLAR SYSTEMS AND THE SUN
July 30 - August 3, 2001, University of Colorado, Boulder, Colorado, USA.
Contact: Thomas R. Ayres, University of Colorado, Campus box 389 (CASA), Boulder, CO 80309, USA.
THE PHYSICS OF CATACLYSMIC VARIABLES AND RELATED OBJECTS
August 5 - 10, 2001, Universitätser Sternwarte, Göttingen, Germany.
Contact: Klaus Reinsch, Universitätser Sternwarte, Geismarlandstr. 11, D-37083 Göttingen, Germany.
Tel: 49 551 394037 Fax: 49 551 395043 Email: cvconference@uni-sw.gwdg.de

THE EARLIEST STAGES OF MASSIVE STAR BIRTH
August 6 - 8, 2001, Boulder, Colorado, USA.
Contact: Kelsey Johnson, JILA, University of Colorado, PO Box 0440, Boulder, CO 80309-0440, USA.
Email: StarBirth@jila.colorado.edu http://jilaww.colorado.edu/StarBirth

LIGHTHOUSES OF THE UNIVERSE: MOST LUMINOUS CELESTIAL OBJECTS AND THEIR USE FOR COSMOLOGY
August 6 - 9, 2001, Garching, Germany.
Contact: Marat Gilfanov, Max Planck Institute for Astrophysics, Karl-Schwarzschild Str. 1, Postfach 1317, D - 85741 Garching, Germany.
Tel: 49 89 3299 3219 Fax: 49 89 3299 3235 http://www.mpa-garching.mpg.de/~gilfanov/lighthouses

METEROIDS 2001
August 6 - 10, 2001, Swedish Institute of Space Physics, ESA; Swedish Space Corporation-ESRANGE
Contact: Asta Pellinen-Wannberg, Swedish Institute of Space Physics, Box 812, S - 981 28 Kiruna, Sweden.
Tel: 46 980 79118 Fax: 46 980 79050 Email: asta@irf.se http://www.irf.se/Meteoroids2001/

OMEGA CENTAURI, A UNIQUE WINDOW INTO ASTROPHYSICS
Contact: Floor van Leeuwen, Institute of Astronomy, Cambridge, CB3 0HA, UK.
Email: ocen@ast.cam.ac.uk http://www.ast.cam.ac.uk/~ocene

NEUTRON STARS IN SUPERNOVA REMNANTS
August 14 - 17, 2001, Boston, MA, USA.
Contact: Bryan Gaensler, MIT, 77 Massachusetts Ave., Cambridge, MA 02139, USA.
Tel: 1 617 258 8523 Fax: 1 617 253 0861 Email: psr_sn@head-cfa.harvard.edu http://hea-www.harvard.edu/PSR_SNR

THE FOURTH INTERNATIONAL CONFERENCE ON ORIENTAL ASTRONOMY
August 19 - 25, 2001, Nanyang, Henan, China P.R.
Contact: Conference Secretariat, Chinese Institute for Zhang Heng of Nanyang, Administration Building of People's Congress, People North Road, 473000, Nanyang, Henan, China, P.R.
Tel: 86 377 3311552 Fax: 86 377 3311302 Email: CPHS@public2.east.cn.net

VARIABLE STARS 2001
August 20 - 24, 2001, Odessa, Ukraine.
Contact: Valentin G. Karetnikov, Ivan L. Andronov, Astronomical Observatory, Odessa State University, T.G. Shevchenko Park, Odessa, Ukraine 65014.
Tel: 38 0482 220396 Fax: 38 0482 228442 Email: astro@paco.odessa.ua

TWO YEARS OF SCIENCE WITH CHANDRA
September 5 - 7, 2001, Washington, DC, USA.
Contact: Harvey Tananbaum, SAO, 60 Garden St., Cambridge, MA 02138, USA.
Tel: 1 617 495 7248 Fax: 1 617 495 7356 Email: ht@cfa.harvard.edu http://asc.harvard.edu/symposium_2001.html

MULTI-WAVELENGTH OBSERVATIONS OF CORONAL STRUCTURE AND DYNAMICS
September 17 - 20, 2001, Kailua-Kona, Hawaii, USA.
Contact: Loren Acton and Piet Martens, Dept. of Physics, Montana State University, Bozeman, MT 59717, USA.
Tel: 1 406 994 6072 Fax: 1 406 994 4452 http://solar.physics.montana.edu/Y10

STEellar ATMospheric Modeling
September 17 - 21, 2001, University of Tübingen, Germany.
Contact: Klaus Werner, IAAT, University of Tübingen, Waldhäuser Str. 64, D - 72076 Tübingen, Germany.
Tel: 49 7071 2978601 Fax: 49 7071 293458 Email: werner@astro.uni-tuebingen.de

CURRENT THEORETICAL MODELS AND FUTURE HIGH RESOLUTION SOLAR OBSERVATIONS
September 17 - 21, 2001, New Mexico, USA.
Contact: Alexei A. Pevtsov, Han Uitenbroek, National Solar Observatory, P.O. Box 62, Sunspot, NM 88349, USA.
Tel: 1 505 434 7011 Fax: 1 505 434 7029 Email: ws21@sunspot.noao.edu http://www.sunspot.noao.edu/INFO/MISC/WORKSHOPS/2001/ws21.html

THE ROLE OF VLBI IN ASTROPHYSICS, ASTROMETRY AND GEODESY
September 17 - 29, 2001, Castel San Pietro Terme Bologna, Italy.
Contact: Franco Mantovani, Istituto di Radioastronomia, CNR, Via Gobetti 101, I - 40129 Bologna, Italy.
Tel: 39 051 639 9377 Fax: 39 051 639 9431 Email: fmantovani@ira.bo.cnr.it http://www.ira.bo.cnr.it/~csp2001
FRONTIERS IN PARTICLE ASTROPHYSICS AND COSMOLOGY
September 29 - October 4, 2001, Lenggries (near München), Germany.
Contact: Ms. Rhona Heywood, European Science Foundation, EURESCO Office, 1 quai Lezay-Marnesia, F - 67080 Strasbourg, France.
Tel: 33 388 76 71 35 Fax: 33 388 36 69 87
Email: rheywood@esf.org http://www.esf.org/euresco/01/pc01142a.htm

VTH INTERNATIONAL CONFERENCE ON GRAVITATION AND ASTROPHYSICS
October 1 - 7, 2001, Moscow, Russia.
Contact: M. Yu. Konstantinov, Centre for Gravitation and Fundamental Metrology of VNIIMS, 3-1 M. Ulyanovoy Str., Moscow 117313, Russia.
Tel: 7 095 1380428 Fax: 7 095 1385446
Email: icga@rgs.phys.msu.su http://www.homepage.techno.ru/rgs

THE EVOLUTION OF GALAXIES. II-BASIC BUILDING BLOCKS
October 16 - 21, 2001, St. Denis de la Réunion, France.
Contact: Laurent Vigroux, CEA, Service d'Astrophysique, F - 91191 Gif-sur-Yvette, France
Tel: 33 1 69 08 39 12 Fax: 33 1 69 08 65 77
E-mail: lvigroux@cea.fr http://www.daec.obspm.fr/ThreeConf.html

SEEING THROUGH THE DUST: THE DETECTION OF HI AND THE EXPLORATION OF THE ISM IN GALAXIES
October 20 - 26, 2001, Penticton, British Columbia, Canada.
Contact: Dominion Radio Astrophysical Observatory, P.O. Box 248, Penticton, British Columbia V2A 6K3, Canada.
Tel: 1 250 493 2277 Fax: 1 250 493 7767
Email: hi50@drao.nrc.ca http://www.drao.nrc.ca/~kerton/hi50.html

THE MASS OF GALAXIES AT LOW AND HIGH REDSHIFT
October 24 - 26, 2001, Venice, Italy.
Contact: ESO, Karl-Schwarzschild-Strasse 2, D - 85748 Garching, Germany
Fax: 49 89 3200 6480
Email: gmass2001@eso.org http://www.eso.org/gen-fac/meetings/gmass2001/

GAMMA RAY BURST AND AFTERGLOW ASTRONOMY
November 5 - 9, 2001, Woods Hole, Massachusetts.
Contact: George Ricker, MIT Center for Space Research, 77 Massachusetts Avenue, Cambridge, MA 02139, USA.
Tel: 1 617-253-7532. Fax: 1 617-258-6921.
Email: grr@space.mit.edu

NEW TRENDS IN THEORETICAL AND OBSERVATIONAL COSMOLOGY
November 13 - 16, 2001, Sanjo Conference Hall, University of Tokyo, Tokyo, Japan.
Contact: Tetsuya Shiromizu, RESCEU, Faculty of Science, University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113-0033.
Tel: 81 3 5841 4191 Fax: 81 3 5841 4224
Email: trend@utap.phys.s.u-tokyo.ac.jp/~trend/trend.html

XXTH INTERNATIONAL CONFERENCE ON NEUTRINO PHYSICS AND ASTROPHYSICS (NEUTRINO 2002)
May 25 - 30, 2002, Munich, Germany.
Contact: Neutrino 2002 Conference Secretaries, Mrs. A. Fueldner and Mrs. S. Rodriguez, Technical University München, Physics Department E15, D-85747 Garching, Germany.
Fax: 49 89 289 12680
Email: neutrino2002@ph.tum.de http://neutrino2002.ph.tum.de

THE CHEMICAL COMPOSITION OF STARS
Spring, 2002, Seattle, Washington, USA.
Contact: George Wallerstein, Univ. of Washington, Astronomy 351580, Seattle, WA 98195.
Tel: 1 206 543 8098 Fax: 1 206 685 0403
Email: wall@astro.washington.edu.

THE EVOLUTION OF GALAXIES. III-FROM SIMPLE APPROACHES TO SELF-CONSISTENT MODELS
July 2002, Kiel, Germany.
Contact: Gerhard Hensler, University of Kiel, Olshausenstr. 40, D - 24098 Kiel, Germany
Tel: 49 431 88 04 125 Fax: 49 431 88 04 100
Email: hensler@astrophysik.uni-kiel.de http://www.daec.obspm.fr/ThreeConf.html

34TH COSPAR SCIENTIFIC ASSEMBLY
October 2002, Houston TX, USA
Contact: COSPAR Secretariat, 51 Bd de Montmorency, F - 75016 Paris, France
Tel: 33 145 250 679 Fax: 33 140 509 827
E-mail: COSPAR@paris7.jussieu.fr