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FAITS DIVERS

While the many impressive events of the IAU XXVI General Assembly in Prague are still vividly on our minds, its reports, proceedings and repercussions are keeping many of us busy today.

We cannot repeat often enough that the IAU owes very much to the chairman of the National Organizing Committee, Jan Palous, the Chairperson of the Local Organizing Committee, Cyril Ron, and the editor of the daily GA newspaper *Dissertatio cum Nuncio Sidereo III*, Jiri George Grygar, and their respective staffs, for a very efficient organization of the IAU XXVI GA and hosting us 2412 participants and 208 accompanying guests. Last but not least, I wish to thank my predecessor, Oddbjorn Engvold, IAU past-president Ronald D. Ekers, and the staff of the IAU Secretariat, Monique Orine and Mary Noel-Giraud, for their outstanding efforts during the preparation and realization of the GA.

Reports on the GA have appeared in the literature (e.g., Peter Shaver, *The Messenger* 125, 51, 2006). Apart from important scientific meetings, exciting social events and fundamental new resolutions, the GA has seen, *inter alia*: - the nomination of 923 new IAU members (a warm welcome!); - the discontinuation of one IAU Commission and 13 IAU Working Groups; - the creation of four new IAU Commissions and 11 new Working Groups; - the creation of 3 new EC Working Groups; and - the first Union-wide preparations for the International Year of Astronomy 2009.

The planet definition issue moved from draft resolution in the *Dissertatio-3* of 16 August to GA-approved resolution in the *Dissertatio-10* of 25 August. The "Pluto debate", as the planet definition resolution process has been referred to, has drawn much comment and attracted world-wide public attention to astronomy and the IAU. The "debate", however, overshadowed numerous other important scientific issues discussed at the GA in the six Symposia, the 17 Joint Discussions, the 7 Special Sessions and the many other exciting science sessions in Division/Commission/Working Group business meetings. The upcoming *Highlights of Astronomy* Volume 14 and *IAU Transactions XXVIB* will provide due testimony of that.

The General Assembly has been honored; memories are alive; gratitude expressed; achievements acknowledged; regrets of what we might have done better openly expressed. Was it worth doing? By all means. Can we do better next time? We'll try. There will always be room for improvement. And, with changing times, we will have to cope with changing demands.

Important events are ahead of us, all needing proper attention and careful preparation.

The year 2007 will see the light of nine new IAU Symposia: S242 through S250, and the 12th Latin-American Regional IAU Meeting (LARIM 2007) in Venezuela, 22-26 October 2007 (section 5.2).

By the time this Information Bulletin is being issued, the IAU Division Presidents are acting as recommendation committee for the selection of nine IAU symposia in 2008. That year will also see the 10th Asian-Pacific Regional IAU Meeting (APRIM 2008) in Kunming, China Nanjing, 1-4 August 2008.

Preparations for the IAU XXVII GA in 2009 in Rio de Janeiro, Brazil, are in the hands of the able NOC headed by Daniela Lazarro and Beatriz Barbuy. Proposals for the scientific program of the Rio GA will have to be submitted to the IAU proposal server before 1 December 2007. The IAU membership better starts thinking about proposals. The year 2009 will also be the International Year of Astronomy (section 3.5.3). Moreover, 2009 will provide an occasion to celebrate the 90th birthday of the IAU. Ideas for that celebration are welcome.

In the meantime, our Chinese colleagues are studying preparations for the IAU XXVIII GA in 2012 in Beijing, China Nanjing.

To achieve all of the above, the IAU members, in the IAU Working Groups and Program Groups, in the IAU Commissions, and in the IAU Divisions, are doing the real work. It is only through their support and efforts that the above mentioned events can succeed. Therefore, to paraphrase an historic saying, “... *don't ask what the IAU can do for you, but ask yourself what you can do for the IAU ...*”, as the world's largest international organization for communication in astronomy.

Above the entrance of the Musée de l'Homme in Paris is written: *Il depend de celui qui entre, que je sois tombe ou trésor*. And further it says: *n'entrez pas sans désir*. One could write these sentences also above the entrance of our offices. To survive, there is only one adagio: carry on.

With my best wishes of the Season, I convey to you my support for all your good intentions for a scientifically productive, constructive, and gratifying 2007.

*Karel A. van der Hucht, General Secretary
Paris, 1 December 2006*

1. EVENTS AND DEADLINES

**Proposals for IAU scientific meetings in 2009: Symposia,
GA Symposia, GA Joint Discussions and GA Special Sessions,
should reach the Assistant General Secretary
via the IAU Proposal Web Server
<<http://solarphys.uio.no/IAU/>>
before 15 December 2007**

**Letters-of-Intent should be submitted to the AGS
before 15 September 2007**

See: <<http://www.iau.org/MEETINGS.6.0.html>>

2007

Jan 30-Feb 1	IAU Officers' Meeting, Paris (France)
Mar 5-24	ISYA 2007, Kuala Lumpur and Langkawi (Malaysia)
Mar 12-16	IAU S242, Astrophysical Masers and their Environments (Australia)
Mar 15	Due date for agenda items for EC83 (May 15-17, 2006)
May 15-17	Executive Committee Meeting EC83, Cape Town (South Africa)
May 21-25	IAU S243, Star-Disk Interaction in Young Stars (France)
May 25	Due date for documents for IAU IB-100
June 25-29	IAU S244, Dark Galaxies and Lost Baryons (UK)
July 16-20	IAU S245, Formation and Evolution of Galaxy Bulges (UK)
July	Mini-ISYA, Beirut (Lebanon)
Sept 5-9	IAU S246, Dynamical Evolution of Dense Stellar Systems (Italy)
Sept 15	Due date for Letters-of-Intent proposing IAU scientific meetings in 2009: Symposia, GA Symposia, GA Joint Discussions and GA Special Sessions
Sept 17-21	IAU S247, Waves and Oscillations in the Solar Atmosphere: Heating and Magneto-Seismology (Venezuela)
Oct 8-12	CAP 2007, Communicating Astronomy with the Public 2007 (Greece)

- Oct 15-19 IAU S248, A Giant Step: from Milli- to Micro-arcsecond
Astrometry (China Nanjing)
- Oct 22-26 IAU S249, Exoplanets: Detection, Formation and Dynamics
(China Nanjing)
- Oct 22-26 LARIM 2007, 12th Latin-American Regional IAU Meeting
(Venezuela)
- Dec 10-14 IAU S250, Massive Stars as Cosmic Engines (USA)
- Dec 15 Deadline for proposals for IAU scientific meetings in 2009
Symposia, GA Symposia, GA Joint Discussions
and GA Special Sessions
- Dec 31 Deadline for nominations for the 2008 Cosmology Prize of the
Peter Gruber Foundation

2008

- Aug 1-4 APRIM 2008, 10th Asian-Pacific Regional IAU Meeting
(China Nanjing)
- Nov 1 Due date for Letters-of-Intent proposing to host the IAU
XXIX General Assembly in 2015

2009

- Apr 1 Deadline for proposals to host the IAU XXIX General
Assembly in 2015
- Aug 3-14 IAU XXVII General Assembly, Rio de Janeiro (Brazil)

2012

- Aug 20-31 IAU XXVIII General Assembly, Beijing (China Nanjing)

2. IAU GENERAL ASSEMBLIES

2.1. IAU XXVI General Assembly, Prague, Czech Republic, 14-25 August 2006

2.1.1. *Brief Report*

The IAU XXVI General Assembly of the International Astronomical Union was held in the Prague Congress Centre in Prague, Czech Republic, 14-25 August 2006. 2412 participants and 208 accompanying guests, from most of the IAU National Members and beyond, took part.

The scientific program consisted of four Invited Discourses, six Symposia (IAU S235 through S240), 17 Joint Discussions, and seven Special Sessions. The Divisions, Commissions and Working Groups held some 97 Business Meetings, many of them also hosting scientific sessions. The Representatives of the National Members, the Finance Committee, and the Nominating Committee held their customary meetings. The Executive Committee held its 81st and 82nd meeting before and during the GA.

The National Organizing Committee, under the chairmanship of Jan Palous, and the Local Organizing Committee chaired by Cyril Ron were instrumental in preparing and running a very smooth organization, which made this GA to a highly successful and very enjoyable scientific event.

The Proceedings of the IAU XXVI GA will be published as the IAU Transactions Vol. XXVIB. Included will be the addresses presented at the Opening Ceremony, the report of the General Assembly, the report of the Executive Committee 2003-2006, the summary of the Union's Finances, the report of the Finance Committee, the reports of the Business Meetings of the Divisions, Commissions and Working Groups, and the report on the Union membership.

The Proceedings of the four Invited Discourses, 17 joint Discussions, and the seven Special Sessions will be published in the Highlights of Astronomy, Vol. 14.

The Proceedings of the six IAU Symposia held during the GA (IAU S235 through S240) will be published individually in the IAU Symposium Proceedings' Series.

IAU Transactions, Highlights of Astronomy and Symposium Proceedings are all published by Cambridge University Press.

The General assembly welcomed three new national Members: Jordan, Mongolia and Thailand. Moreover, 923 new individual members were admitted. On 1 September 2006 the total membership was 9783.

The IAU XXVI General Assembly approved the budget for the triennium 2006-2009, the unit of contribution being CHF 3685 for 2007, CHF 3800 for 2008, and CHF 3900 for 2009.

The composition of the IAU Executive Committee 2006-2009, as elected by the IAU XXVI General Assembly is given on the inside front cover of this IAU Information Bulletin. The names of the twelve new IAU Division Presidents are given on the inside back cover of this bulletin.

2.1.2. Revisions of IAU Statutes, Bye-Laws and Working Rules

The IAU XXVI General Assembly has approved the changes of the IAU Statutes and Bye-Laws as proposed by the Executive Committee in IAU IB97, pp. 41-49. The full texts of IAU Statutes, Bye-Laws and Working Rules are given at

<http://www.iau.org/Statutes_in_English.72.0.html>,

<http://www.iau.org/Bye-Laws_in_English.70.0.html>, and

<http://www.iau.org/Working_Rules_in_English.68.0.html>.

2.1.3. Resolutions adopted by the IAU XXVI General Assembly

2.1.3.1. RESOLUTION 1

Adoption of the P03 Precession Theory and Definition of the Ecliptic

The XXVIth International Astronomical Union General Assembly,

Noting

1. the need for a precession theory consistent with dynamical theory,
2. that, while the precession portion of the IAU 2000A precession-nutation model, recommended for use beginning on 1 January 2003 by resolution B1.6 of the XXIVth IAU General Assembly, is based on improved precession rates with respect to the IAU 1976 precession, it is not consistent with dynamical theory, and
3. that resolution B1.6 of the XXIVth General Assembly also encourages the development of new expressions for precession consistent with the IAU 2000A precession-nutation model, and

Recognizing

1. that the gravitational attraction of the planets make a significant contribution to the motion of the Earth's equator, making the terms lunisolar precession and planetary precession misleading,
2. the need for a definition of the ecliptic for both astronomical and civil purposes, and
3. that in the past, the ecliptic has been defined both with respect to an observer situated in inertial space (inertial definition) and an observer comoving with the ecliptic (rotating definition),

Accepts

the conclusions of the IAU Division I Working Group on Precession and the Ecliptic published in Hilton et al. (2006, *Celest. Mech.* 94, 351), and

Recommends

1. that the terms lunisolar precession and planetary precession be replaced by precession of the equator and precession of the ecliptic, respectively,
2. that, beginning on 1 January 2009, the precession component of the IAU 2000A precession-nutation model be replaced by the P03 precession theory, of Capitaine et al. (2003, *A&A*, 412, 567-586) for the precession of the equator (Eqs. 37) and the precession of the ecliptic (Eqs. 38); the same paper provides the polynomial developments for the P03 primary angles and a number of derived quantities for use in both the equinox based and CIO based paradigms,
3. that the choice of precession parameters be left to the user, and
4. that the ecliptic pole should be explicitly defined by the mean orbital angular momentum vector of the Earth-Moon barycenter in the Barycentric Celestial Reference System (BCRS), and this definition should be explicitly stated to avoid confusion with other, older definitions.

Notes

1. Formulas for constructing the precession matrix using various parameterizations are given in Eqs. 1, 6, 7, 11, 12 and 22 of Hilton et al. (2006). The recommended polynomial developments for the various parameters are given in Table 1 of the same paper, including the P03 expressions set out in expressions (37) to (41) of Capitaine et al. (2003) and Tables 3-5 of Capitaine et al. (2005).
2. The time rate of change in the dynamical form factor in P03 is

$$dJ_2/dt = 0.3001 \times 10^{-9} \text{ century}^{-1}$$

References

- Capitaine, N., Wallace, P.T., & Chapront, J. 2003, *A&A*, 412, 567
- Capitaine, N., Wallace, P.T., & Chapront, J. 2005, *A&A*, 432, 355
- Hilton, J.L., Capitaine, N., Chapront, J., Ferrandiz, J.M., Fienga, A., Fukushima, T., Getino, J., Mathews, P., Simon, J.-L., Soffel, M., Vondrak, J., Wallace, P., & Williams, J. 2006, *Celest. Mech.*, 94, 351

Actions to be taken by the General Secretary upon adoption of the Resolution:

Adoption of the P03 Precession Theory and Definition of the Ecliptic

The following institutions should receive formal notification of the action:

Her Majesty's Nautical Almanac Office, Institute de mécanique céleste et de calcul des éphémérides, Institute of Applied Astronomy of the Russian Academy of Sciences, International Association of Geodesy, (IAG), International Earth Rotation and Reference Systems Service (IERS), International Union of Geodesy and Geophysics (IUGG), International VLBI Service for Geodesy and Astrometry (IVS), Japan Coast Guard (JCG), National

Astronomical Observatory of Japan (NAOJ), Nautical Almanac Office of the United States Naval Observatory.

2.1.3.2. **RESOLUTION 2**

Supplement to the IAU 2000 Resolutions on reference systems

RECOMMENDATION 1. Harmonizing the name of the pole and origin to “intermediate”

The XXVIth International Astronomical Union General Assembly,
Noting

1. the adoption of resolutions IAU B1.1 through B1.9 by the IAU General Assembly of 2000,
2. that the International Earth Rotation and Reference Systems Service (IERS) and the Standards Of Fundamental Astronomy (SOFA) activity have made available the models, procedures, data and software to implement these resolutions operationally, and that the Almanac Offices have begun to implement them beginning with their 2006 editions, and
3. the recommendations of the IAU Working Group on “Nomenclature for Fundamental Astronomy” (IAU Transactions XXVIA, 2005), and

Recognizing

1. that using the designation “intermediate” to refer to both the pole and the origin of the new systems linked to the Celestial Intermediate Pole and the Celestial or Terrestrial Ephemeris origins, defined in Resolutions B1.7 and B1.8, respectively would improve the consistency of the nomenclature, and
2. that the name “Conventional International Origin” with the potentially conflicting acronym CIO is no longer commonly used to refer to the reference pole for measuring polar motion as it was in the past by the International Latitude Service,

Recommends

1. that, the designation “intermediate” be used to describe the moving celestial and terrestrial reference systems defined in the 2000 IAU Resolutions and the various related entities, and
2. that the terminology “Celestial Intermediate Origin” (CIO) and “Terrestrial Intermediate Origin” (TIO) be used in place of the previously introduced “Celestial Ephemeris Origin” (CEO) and “Terrestrial Ephemeris Origin” (TEO), and
3. that authors carefully define acronyms used to designate entities of astronomical reference systems to avoid possible confusion.

RECOMMENDATION 2. Default orientation of the Barycentric Celestial Reference System (BCRS) and Geocentric Celestial Reference System (GCRS)

The XXVIth International Astronomical Union General Assembly,

Noting

1. the adoption of resolutions IAU B1.1 through B1.9 by the IAU General Assembly of 2000,
2. that the International Earth Rotation and Reference Systems Service (IERS) and the Standards Of Fundamental Astronomy (SOFA) activity have made available the models, procedures, data and software to implement these resolutions operationally, and that the Almanac Offices have begun to implement them beginning with their 2006 editions,
3. that, in particular, the systems of space-time coordinates defined by IAU 2000 Resolution B1.3 for (a) the solar system (called the Barycentric Celestial Reference System, BCRS) and (b) the Earth (called the Geocentric Celestial Reference System, GCRS) have begun to come into use,
4. the recommendations of the IAU Working Group on “Nomenclature for Fundamental Astronomy” (IAU Transactions XXVIA, 2005), and
5. a recommendation from the IAU Working Group on “Relativity in Celestial Mechanics, Astrometry and Metrology”,

Recognizing

1. that the BCRS definition does not determine the orientation of the spatial coordinates,
2. that the natural choice of orientation for typical applications is that of the ICRS, and
3. that the GCRS is defined such that its spatial coordinates are kinematically non-rotating with respect to those of the BCRS,

Recommends

that the BCRS definition is completed with the following: “For all practical applications, unless otherwise stated, the BCRS is assumed to be oriented according to the ICRS axes. The orientation of the GCRS is derived from the ICRS-oriented BCRS.”

Note on Resolution 2:

Resolution 2, adopted by the 27th IAU General Assembly states in its "Noting" 2, that the International Earth Rotation and Reference Systems Service (IERS) and the Standards Of Fundamental Astronomy (SOFA) activity have made available the models, procedures, data and software to implement the IAU 2000 resolutions operationally, and that the almanac offices have begun to implement them beginning with their 2006 editions.

2006 is the year of the edition for which most of the worldwide-accessible almanacs have implemented the IAU 2000 resolutions. However, it should be noted that the Polish Almanac of the Institute of Geodesy and Cartography (Warsaw, Poland), began implementing the IAU 2000 resolutions in their 2004 edition. We are pleased to acknowledge the efforts that our Polish colleagues made to implement the changes with so little delay.

Nicole Capitaine, Chair of the IAU Division 1 Working Group on Nomenclature for Fundamental Astronomy (NFA) (2003-2006)

2.1.3.3. **RESOLUTION 3**

Re-definition of Barycentric Dynamical Time, TDB

The XXVIth International Astronomical Union General Assembly,

Noting

1. that IAU Recommendation 5 of Commissions 4, 8 and 31 (1976) introduced, as a replacement for Ephemeris Time (ET), a family of dynamical time scales for barycentric ephemerides and a unique time scale for apparent geocentric ephemerides,
2. that IAU Resolution 5 of Commissions 4, 19 and 31 (1979) designated these time scales as Barycentric Dynamical Time (TDB) and Terrestrial Dynamical Time (TDT) respectively, the latter subsequently renamed Terrestrial Time (TT), in IAU Resolution A4, 1991,
3. that the difference between TDB and TDT was stipulated to comprise only periodic terms, and
4. that Recommendations III and V of IAU Resolution A4 (1991) (i) introduced the coordinate time scale Barycentric Coordinate Time (TCB) to supersede TDB, (ii) recognized that TDB was a linear transformation of TCB, and (iii) acknowledged that, where discontinuity with previous work was deemed to be undesirable, TDB could be used, and

Recognizing

1. that TCB is the coordinate time scale for use in the Barycentric Celestial Reference System,
2. the possibility of multiple realizations of TDB as defined currently,
3. the practical utility of an unambiguously defined coordinate time scale that has a linear relationship with TCB chosen so that at the geocenter the difference between this coordinate time scale and Terrestrial Time (TT) remains small for an extended time span,
4. the desirability for consistency with the Teph time scales used in the Jet Propulsion Laboratory (JPL) solar-system ephemerides and existing TDB implementations such as that of Fairhead & Bretagnon (*A&A* **229**, 240, 1990), and

5. the 2006 recommendations of the IAU Working Group on "Nomenclature for Fundamental Astronomy" (IAU Transactions XXVIB, 2006),

Recommends

that, in situations calling for the use of a coordinate time scale that is linearly related to Barycentric Coordinate Time (TCB) and, at the geocenter, remains close to Terrestrial Time (TT) for an extended time span, TDB be defined as the following linear transformation of TCB:

$$\text{TDB} = \text{TCB } L_B \times (\text{JD}_{\text{TCB}} - T_0) \times 86400 + \text{TDB}_0,$$

where $T_0 = 2443144.5003725$, and

$L_B = 1.550519768 \times 10^{-8}$ and $\text{TDB}_0 = 6.55 \times 10^5$ s are defining constants.

Notes

1. JD_{TCB} is the TCB Julian date. Its value is $T_0 = 2443144.5003725$ for the event 1977 January 1 00h 00m 00s TAI at the geocenter, and it increases by one for each 86400s of TCB.
2. The fixed value that this definition assigns to L_B is a current estimate of $L_C + L_G - L_C \times L_G$, where L_G is given in IAU Resolution B1.9 (2000) and L_C has been determined (Irwin & Fukushima, 1999, *A&A* **348**, 642) using the JPL ephemeris DE405. When using the JPL Planetary Ephemeris DE405, the defining L_B value effectively eliminates a linear drift between TDB and TT, evaluated at the geocenter. When realizing TCB using other ephemerides, the difference between TDB and TT, evaluated at the geocenter, may include some linear drift, not expected to exceed 1 ns per year.
3. The difference between TDB and TT, evaluated at the surface of the Earth, remains under 2 ms for several millennia around the present epoch.
4. The independent time argument of the JPL ephemeris DE405, which is called Teph (Standish, *A&A*, **336**, 381, 1998), is for practical purposes the same as TDB defined in this Resolution.
5. The constant term TDB_0 is chosen to provide reasonable consistency with the widely used TDB TT formula of Fairhead & Bretagnon (1990).
n.b. The presence of TDB_0 means that TDB is not synchronized with TT, TCG and TCB at 1977 Jan 1.0 TAI at the geocenter.
6. For solar system ephemerides development the use of TCB is encouraged.

2.1.3.4. **RESOLUTION 4**

Endorsement of the Washington Charter for Communicating Astronomy with the Public

The Washington Charter was one of the outcomes of the 2nd International Conference on Communicating Astronomy with the Public held in Washington

DC in October 2003. Council endorsed the Washington Charter in March 2004. Nineteen other societies, organizations and facilities have endorsed the Charter, including the BAA and PPARC. At the Communicating Astronomy with the Public 2005 meeting in Garching a revised version of the Charter was proposed. This softened the language and also tidied up some of the phraseology. This was endorsed by the attendees and accepted by the IAU Working Group. The revised version is appended.

The IAU General Assembly is requested to confirm endorsement of the Revised Washington Charter.

The Washington Charter for Communicating Astronomy with the Public

As our world grows ever more complex and the pace of scientific discovery and technological change quickens, the global community of professional astronomers needs to communicate more effectively with the public. Astronomy enriches our culture, nourishes a scientific outlook in society, and addresses important questions about humanity's place in the universe. It contributes to areas of immediate practicality, including industry, medicine, and security, and it introduces young people to quantitative reasoning and attracts them to scientific and technical careers. Sharing what we learn about the universe is an investment in our fellow citizens, our institutions, and our future. Individuals and organizations that conduct astronomical research - especially those receiving public funding for this research - have a responsibility to communicate their results and efforts with the public for the benefit of all.

Recommendations

For Funding Agencies:

Encourage and support public outreach and communication in projects and grant programs. Develop infrastructure and linkages to assist with the organization and dissemination of outreach results. Emphasize the importance of such efforts to project and research managers. Recognize public outreach and communication plans and efforts through proposal selection criteria and decisions and annual performance awards. Encourage international collaboration on public outreach and communication activities.

For Professional Astronomical Societies:

Endorse standards for public outreach and communication. Assemble best practices, formats, and tools to aid effective public outreach and communication. Promote professional respect and recognition of public outreach and communication. Make public outreach and communication a visible and integral part of the activities and operations of the respective societies. Encourage greater linkages with successful ongoing efforts of amateur astronomy groups and others.

For Universities, Laboratories, Research Organizations, and Other Institutions:

Acknowledge the importance of public outreach and communication. Recognize public outreach and communication efforts when making decisions on hiring,

tenure, compensation and awards. Provide institutional support to enable and assist with public outreach and communication efforts. Collaborate with funding agencies and other organizations to help ensure that public outreach and communication efforts have the greatest possible impact. Make available formal public outreach and communication training for researchers. Offer communication training in academic courses of study for the next generation of researchers.

For Individual Researchers:

Support efforts to communicate the results and benefits of astronomical research to the public, convey the importance of public outreach and communication to team members. Instill this sense of responsibility in the next generation of researchers

Authored by CCAP, Washington DC, October 2003, Revised by CAP 2005, Garching bei München, June 2005

2.1.3.5. **RESOLUTION 5**

Definition of a Planet in the Solar System

Contemporary observations are changing our understanding of planetary systems, and it is important that our nomenclature for objects reflect our current understanding. This applies, in particular, to the designation "planets". The word "planet" originally described "wanderers" that were known only as moving lights in the sky. Recent discoveries lead us to create a new definition, which we can make using currently available scientific information.

The IAU therefore resolves that planets and other bodies, except satellites, in our Solar System be defined into three distinct categories in the following way:

1. A planet⁽¹⁾ is a celestial body that
 - a. is in orbit around the Sun,
 - b. has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape, and
 - c. has cleared the neighbourhood around its orbit.
2. A "dwarf planet" is a celestial body that
 - a. is in orbit around the Sun,

Footnotes Resolution 5

⁽¹⁾ *The eight planets are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.*

⁽²⁾ *An IAU process will be established to assign borderline objects to the dwarf planet or to another category.*

- b. has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape⁽²⁾,
 - c. has not cleared the neighbourhood around its orbit, and
 - d. is not a satellite.
3. All other objects⁽³⁾, except satellites, orbiting the Sun shall be referred to collectively as "Small Solar System Bodies".

2.1.3.6. **RESOLUTION 6**

Pluto

The IAU further resolves:

Pluto is a "dwarf planet" by the above definition and is recognized as the prototype of a new category of Trans-Neptunian Objects⁽¹⁾.

Footnotes Resolution 5 (Continued)

⁽³⁾ *These currently include most of the Solar System asteroids, most Trans-Neptunian Objects (TNOs), comets, and other small bodies.*

Footnote Resolution 6

⁽¹⁾ *An IAU process will be established to select a name for this category.*

2.1.4. IAU Budget 2007-2009

INCOME	2007	2008	2009	2007-09
Adhering Organizations	965470	995600	1021800	2982870
Publications: Royalties	20000	20000	20000	60000
Bank Interests	10000	10000	10000	30000
Gains Transfers/Exchange	10000	10000	10000	30000
Total Income	995470	1025600	1051800	3102870
EXPENDITURE	2007	2008	2009	2007-09
SCIENTIFIC ACTIVITIES				
General Assemblies				
Grants	-	-	235000	235000
Operations	4000	8000	50000	62000
<i>Sub-total General Assembly</i>	<i>4000</i>	<i>8000</i>	<i>285000</i>	<i>297000</i>
Meetings				
Symposia/Colloquia	225000	225000	225000	675000
Regional Meetings	30000	30000		60000
<i>Sub-total Meetings</i>	<i>255000</i>	<i>255000</i>	<i>226000</i>	<i>735000</i>
Commissions/Working Groups				
Telegram Bureau	4000	4000	4000	12000
Minor Planet Center	12000	12000	12000	36000
Meteor Data Center	2000	2000	2000	6000
EC WGs	5000	5000	5000	15000
Commission WGs	5000	5000	5000	15000
<i>Sub-total Commissions/WGs</i>	<i>28000</i>	<i>28000</i>	<i>28000</i>	<i>84000</i>
Total SCIENTIFIC ACTIVITIES	287000	291000	538000	1116000
EDUCATIONAL ACTIVITIES				
ISYA	45000	45000	-	90000
TAD	45000	45000	45000	135000
Exchange of Astronomers	15000	15000	15000	45000
Other Activities	15000	15000	15000	45000
Total EDUCATION	120000	120000	75000	315000
DELEG. TO OTHER UNIONS	12000	12000	12000	36000
DUES TO OTHER UNIONS				
ICSU	7500	7500	7500	22500
ERS/FAGS	10000	10000	10000	30000
IUCAF	7500	7500	7500	22500
Total DUES TO OTHER UNIONS	25000	25000	25000	75000

EXECUTIVE COMMITTEE

Executive Committee meetings	45000	80000	80000	205000
Officers meetings	12000	12000	12000	36000
General Secretary	30000	30000	30000	90000
Asst General Secretary	2000	2000	2000	6000
Year of Astronomy	2000	2000	8000	12000
<i>Total EXECUTIVE COMMITTEE</i>	<i>91000</i>	<i>126000</i>	<i>132000</i>	<i>349000</i>
<i>PUBLICATIONS</i>	<i>10000</i>	<i>10000</i>	<i>10000</i>	<i>30000</i>

ADMINISTRATION

Salaries & Charges	286790	286790	286790	860370
Training courses	5000	5000	5000	15000
General office expenses	82000	85000	90000	257000
Audit fee	2500	2500	2500	7500
Bank charges	4000	4000	4000	12000
<i>Total ADMINISTRATION</i>	<i>380290</i>	<i>383290</i>	<i>388290</i>	<i>1151870</i>
TOTAL EXPENDITURE	925290	967290	1180290	3072870
Excess of Income over Expenditure	80180	68310	-118490	30000

2.1.5. Report on the Young Astronomers Events

This year at General Assembly of the IAU, two new initiatives for young astronomers were established. They were the lunch-debate and the consulting service. The purpose of these events was to mediate contact between young astronomers and experienced astronomers from various countries and institutions like ESA, NASA, ESO, etc.

The lunch debate was organized as a buffet with discussions of young astronomers with the guest astronomers at the round tables. There were 20 round tables, each with 11 participants - 9 were young astronomers and 2 were guest astronomers. At each round table 2 to 3 themes, chosen according to suggestions and votes of young astronomers through web interface before the General Assembly, were discussed. The themes touched three main areas - first on institutions like ESA, NASA and possibilities of young astronomers there, second on CV, applications for postdocs and job opportunities and third on what it means to be a scientist. In total 177 young astronomers from 45 different countries and 41 guest astronomers participated in the lunch debate. There were 11 undergraduated or graduated students without Ph.D. and 145 had PhD degree out of whom 39 were in postdoc positions, 11 participants did not fill in the questionnaire. The participants were distributed in the following age-groups: below 20 years (3); 20-24 years (30); 25-29 years (82); 30-35 years (47) and above 35 years (4).

An assessment questionnaire was filled by the participants after the event with the following results:

1. Has the YA event increased your sense of participation at the IAU GA? Yes: 85 %
2. Effectiveness of providing interaction between young astronomers: Effective: 74 %
3. Effectiveness of providing interaction with senior astronomers: Effective: 89 %
4. How well were the topics covered at your table? Well: 80 %
5. Will you attend the GA in 2009 and if so would you attend another YA-LD? Yes: 93 %
6. Do you think the event was a success? Yes: 98 %
7. Comments: YA were impressed by the possibility to talk with "high ranked" astronomers.

We must therefore conclude that this event was really very successful and it should be organized in a similar form at the next GA as well.

The other initiative for young astronomers the *Young Astronomers' Consulting Service* was running during the whole General Assembly. There was a clearly identified office in the Prague Congress Center (where the GA took place) where Young Astronomers could, by arranged appointments, meet with more experienced astronomers to seek advice on their CV, thesis, jobs, etc. during one-to-one discussions. Many young astronomers used this possibility and according to their comments they thought this initiative was very useful. These events could have been set up thanks to the creativity and enthusiasm of Michael Dovciak.

Michèle Gerbaldi, chair Young Astronomers Events, Paris, France, September 2006.

2.1.6. Report on Women in Astronomy Luncheon Meeting, 21 August 2006

The Women in Astronomy lunch was held on Monday 21 August. The Lunch Meeting was preceded by a business meeting of the IAU EC Working Group for Women in Astronomy. The Women in Astronomy lunch was attended by the current president of the IAU Ronald D. Ekers, the incoming President Catherine J. Cesarsky, the first woman to hold this position, the General Secretary and Vice-Presidents, many senior astronomers, as well as young astronomers and students. The total number of participants was 301 coming from 49 countries. The geographical distribution was adequate, ranging from large, developed countries (United States, Russian Federation, Germany, Italy, France, United Kingdom) to developing countries (Armenia, Honduras, Indonesia, Iran, Macedonia, Philippines, Trinidad & Tobago, VietNam). The large majority, 92 percent of participants, consisted of women. The meeting was hosted by the EC Working Group for Women in Astronomy and was chaired by the co-chair of this WG, Anne Green.

The focus of this meeting was on changes in the status of women in astronomy since the 2003 General Assembly in Sydney and on formulation of strategies that will improve the environment for all astronomers.

All participants received a copy of “The Baltimore Charter for Women in Astronomy”.

Keynote speakers were Prof. Sunetra Giridhar (Indian Institute of Astronomy, Bangalore, India) and Dr. Patricia Knezek (WYIN Observatory, Arizona, USA). The subject of the meeting was “Career Development for Women”.

Sunetra Giridhar started her talk with information about women literacy in India. It is 54 % and it is increasing (for both genders), but very different in different parts of India. The proportion of women in astronomy is increasing in India in the last few decades, also in senior positions, but only in states where the women literacy increases (for example in Maharashtra, West Bengal). Some of Indian women in astronomy are working abroad. There is a plan prepared by the departments of science and Technology SERC named "Women Scientist Scheme" - three year grants for women to obtain sufficient results helping them to get a good positions.

Patricia Knezek spoke about "Women in astronomy in the AAS community: Past + Present = Plan for the Future". She presented various statistics showing the position of women in astronomy in the past and during recent years. There are a lot of young women interested in astronomy during their student years (The 60% Cohort in the U.S.). If the female proportion in astronomy declines with age, being highest for students and smallest in permanent positions, then the main question is: where do these women go? Why women still seem to be either slow or leave their careers? The first step is a more detailed statistical survey in the astronomical community, although the background could vary between countries. The situation also varies widely from institution to institution. There is a substantial need to establish reliable, well understood statistics. As a second step we need to answer the question why. The AAS/AIP is working on The Longitudinal Study of Astronomical Career Path. There is not only the traditional view of success, but there are another alternative career ways. The astronomical land is changing now. Large collaborative efforts are increasing; demand for education is increasing as well as roles in science and university management, public outreach, science policy, programming, instrumentation. In this way many varied fields are opening for "career" in astronomy. The main point is that full participation of men and women in astronomy will maximize the excellence in the field.

These two presentations were followed by discussions in breakout groups of 10 on five most important issues over lunch:

- Unequal opportunity: has discrimination gone underground?
- Mentoring and self-confidence: does women network work effectively or are our discussions supportive but not constructive? How can we upwardly manage our careers better? Do young women astronomers need more role

models? Who makes an effective mentor? Suggestions and strategies for building self-confidence; are women more reluctant to promote themselves? Anecdotal evidence suggests that women base their application on past achievements rather than on their potentials for a job, which men do. Do you agree?

- Family responsibilities: is there an easier time to manage having children? What kind of provision for childcare is critical at workplaces and conferences? After a career interruption, is your re-entry at a lower level, which then makes the path to senior position a longer one? Since women are still (generally) the primary caregivers, is there a greater vulnerability for research disruption and exclusion from time critical projects?
- Dual careers: equal advancement of two careers is extremely difficult. Lack of mobility often affects women more than men. How can we mitigate this? How can we encourage greater consideration of options for partners? Can we make a paradigm shift so that a non-standard career path is not a disadvantage?
- What do recent statistics tell us? Now that the gender imbalance at school and university has largely disappeared, how do we ensure this translates into greater representation for women in permanent and senior appointments, in positions that carry decision-making responsibilities and prestige?

Members of these randomly created table-groups could exchange and share various points of views coming from different countries and various types of institutions. These discussions were very interesting, deep and detailed, and women in astronomy were very active in them.

Then results of these groups were reported back to the plenary session at the end of meeting.

The following action items were submitted to the incoming IAU Executive: ensure adequate representation for women in IAU bodies, on Science Organizing Committees and as invited speakers for Symposia, make the provision of childcare at meetings, either supplied or paid for, a priority. By the way, this General Assembly of the IAU has started a new era with the first woman elected for the IAU president, Catherine J. Cesarsky. It was also mentioned that the IAU gender statistics gives an incomplete picture because younger astronomers, both men and women, are not usually members of the IAU.

This Women in Astronomy meeting was an excellent opportunity to exchange ideas and experience. Organizers hope to prepare such meeting again for the next GA IAU in Rio de Janeiro in 2009 and next such meeting would be very helpful to improve the environment for women in astronomy.

Jana Tichá, Ceske Budejovice, Czech Republic, 5 October 2006

**2.2. IAU XXVII General Assembly, Rio de Janeiro, Brazil,
3-14 August 2009**

The city of Rio de Janeiro is well-known for its breath taking scenery, surrounded by a lush forest and awesome granite mountains, complemented by beautiful beaches and a deep blue sea. The weather is hot and tropical nearly all year round and slightly cooler during the months of June through August, when typical temperatures range from a chilly 19°C to a warmer 28°C. In addition, Rio is considered one of the world's prime destinations, particularly because of its exotic and vibrant culture and the warm hospitality of the "Carioca"(Rio people).

Rio, however, is not only a prime tourist destination. The great concentration of scientific and technological activities also characterizes Rio as one of the most important centers in Brazil and Latin America. It is the place where the first Brazilian national observatory was established by Emperor Don Pedro I, in 1827, and continues to host a wide spectrum of Brazilian creative thinking and development. In the last decade, astronomy in Brazil has experienced major growth and development, together with significant participation in international astronomical projects, such as Gemini and SOAR.

On behalf of the Brazilian astronomical community, the National Organizing Committee of the IAU XXVII General Assembly warmly invites the IAU membership to take part of this coming Assembly in Rio de Janeiro, August 2009.

**2.3. IAU XXVIII General Assembly, Beijing, China Nanjing,
20-31 August 2012**

During its 81st meeting, the IAU Executive Committee voted in favor of the proposal of the Chinese Astronomical Society to host the IAU XXVIII General Assembly, in August 2012, in Beijing, China Nanjing.

**2.4. Deadline for proposals to host the IAU XXIX General Assembly
in 2015**

The IAU Executive Committee solicits proposals for hosting the IAU XXIX General Assembly in August 2015. Letters-of-Intent are welcome before 1 November 2008. Complete bid-books should reach the EC before the deadline of 1 April 2009. Rules and Guidelines are available at: <http://www.iau.org/Instructions_for_Hosting_GAs.322.0.html>.

3. EXECUTIVE COMMITTEE

3.1. EC81, Prague, Czech Republic, 13, 14, 15, and 23 August 2006

3.1.1. *Brief report*

The 81st meeting of the IAU Executive Committee took place during the IAU XXVI General Assembly In Prague, Czech Republic, on 13 August 2006 in the headquarters of the Academy of Sciences of the Czech Republic, and on 14, 15, 23 and 24 August 2006 in the Prague Congress Centre. The sessions were partly joined by the IAU Division Presidents.

Much time has been devoted to discuss procedures of informing the IAU membership of the recommendations of the ad hoc EC Planet Definition Committee (membership: Owen Gingerich (USA, chair), Richard P. Binzel (USA), André Brahic (France), Catherine J. Cesarsky (IAU, ex officio), Dava Sobel (USA), Jun-ichi Watanabe (Japan), and Iwan P. Williams (UK)). The IAU EC has done the utmost to make sure to inform the IAU membership before the press was informed.

Apart from the regular agenda items, decisions were *inter alia* (most of which are reported on further in this IB):

The EC appointed an EC Advisory Committee on Hazards of Near-Earth Objects, chaired by David Morrison (USA).

The EC agreed with the appointment of a Press Officer for GA XXVI: Lars Lindberg Christensen (Germany).

The EC took note of all new Division, Commission, Working Group and Program Group presidents, chair persons, and organizing committees.

The EC was pleased to note that a Memorandum of Agreement for continued operation of the IAU Minor Planet Center had recently been signed by the Director of the Harvard-Smithsonian Center for Astrophysics and the IAU General Secretary. Drs. Michael F. A'Hearn (USA), Steven R. Chesley (USA), Hans Rickman (Sweden) and Giovanni Valsecchi (Italy), who have assisted the IAU GS in the negotiations with the SAO Director that led to the MoA, will constitute the MPC Advisory Committee. The EC took note of the fact that Dr. Brian G. Marsden stepped down as MCP Director after 28 years of impeccable service to the IAU and to the astronomical community at large, and that Dr. Timothy B. Spahr is appointed interim MPC Director, till a new Director is in appointed.

The EC appointed IAU representatives to scientific organizations and unions for the period 2006-2009.

Past-President Franco Pacini reviewed the status of the *International Year of Astronomy 2009*, as approved by UNESCO in 2005. The GA plenary session on 18 August 2006 provided ideas and recommendations.

The EC selected by vote the offer by the Chinese Astronomical Society to host the IAU XXVIII GA in Beijing (China Nanjing), 20-31 August 2012. The EC is always very appreciative to organizers of such major events.

3.1.2. Executive Committee 2006-2009

The chairman of the Special Nominating Committee informed the EC of the constitution of the EC for the period 2006-2009:

President:	Catherine J. Cesarsky (Germany)
President-Elect:	Robert Williams (USA)
General Secretary:	Karel A. van der Hucht (the Netherlands)
Assistant General Secretary:	Ian F. Corbett (UK)
Vice-Presidents:	Beatriz L.S. Barbuy (Brazil), Cheng Fang (China Nanjing), Martha P. Haynes (USA), George K. Miley (the Netherlands), Giancarlo Setti (Italy), Brian Warner (South Africa)
Advisers:	Ronald D. Ekers, Past-President (Australia) and Oddbjorn Engvold, Past-GS (Norway)

3.1.3. Special Nominating Committee 2006-2009

The constitution of the IAU Special Nomination Committee 2006-2009, as approved by the GA is:

Chair: Catherine J. Cesarsky (IAU President).

Members: Philip A. Charles (South Africa), Ronald D. Ekers (Australia), Julieta Fierro (Mexico), Eva K. Grebel (Switzerland), Sadanori Okamura (Japan), and Grazina Tautvaisiene (Lithuania).

Advisers: K.A. van der Hucht (IAU GS), and Ian F. Corbett (IAU AGS).

3.1.4. Finance Sub-Committee 2006-2009

The constitution of the IAU Finance Sub-Committee 2006-2009, as approved by the GA is:

Chair: Paul G. Murdin (UK).

Members: Xiangqun Cui (China Nanjing), Kevin B. Marvel (USA), Birgitta Nordström (Denmark), John W. O'Byrne (Australia), and Cyril Ron (Czech Republic).

3.1.5. Resolutions Committee 2006-2009

The constitution of the IAU Resolution Committee 2006-2009, as approved by the GA is:

Chair: Jocelyn S. Bell Burnell (UK).

Members: Michel Dennefeld (France), Brian Warner (South Africa), and Rachel L. Webster (Australia).

3.2. EC82, Prague, Czech Republic, 25 August 2006 - *Brief report*

The 82nd meeting of the IAU Executive Committee took place during the IAU XXVI General Assembly in Prague, Czech Republic, on 25 August 2006 in the Prague Congress Centre, the day after the Closing Ceremony of the GA. The meeting was joined by the new IAU Division Presidents.

Agenda items and decisions were, *inter alia*:

The Chair of the IAU XXVI GA National Organizing Committee, Jan Palous, presented his preliminary report, which was discussed, as well as reports on all other major events by the respective organizers and a report from the IAU XXVI GA Press Officer.

The EC extended the appointment of Lars Lindberg Christensen as IAU Press Officer for the academic year 2006-2007 (see section 3.6).

As a follow-up of the resolutions adopted by the IAU XXVI General Assembly, considering the rejection of the name "plutons" for the category of Pluto-like objects, the EC will initiate a process for finding a better name for this category.

The EC will investigate possibilities for electronic voting on non-scientific issues.

Preparations for IAU XXVII GA in Rio de Janeiro, 3-14 August 2009, are underway. The NOC/LOC was well represented in Prague and continues its preparations with increased zeal.

The EC appointed an EC Working Group on IAU General Assemblies, with as membership representatives of recent and future GAs (see section 3.5.3).

The IAU EC is following with interest the preparations of the *International Heliophysical Year 2007*, as reported by IAU liaison David F. Webb (see section 11).

The EC decided to appoint an EC Working Group on the *International Year of Astronomy 2009*, chaired by Catherine J. Cesarsky (see section 3.5.2).

3.3. Officers' Meeting, Paris, 30 January-1 February 2007

The 2007 IAU Officers' meeting will take place 30 January-1 February 2007 at the IAU Secretariat, Paris, France.

3.4. EC83, Cape Town, South Africa, 15-17 May 2007

The IAU Executive Committee will have its 83rd meeting 15-17 May 2007 in Cape Town, South Africa. The due date for agenda items is 15 March 2007.

3.5. New EC Advisory Committee & Working Group

3.5.1. *EC Advisory Committee on Hazards of Near-Earth Objects*

The IAU Executive Committee, in its 81st meeting, during the IAU XXVI General Assembly, has approved the establishment of an *EC Advisory Committee on Hazards of Near-Earth Objects*.

Chairperson: David Morrison (USA) <david.morrison@arc.nasa.gov>.

Members: Richard P. Binzel (USA), Andrea Carusi (Italy), Andrea Milani (Italy), Donald K. Yeomans (USA), and the Director of IAU Minor Planet Center, Timothy B. Spahr (USA).

Rationale: the IAU Role

One knows currently close to 850 Near Earth Asteroids (NEAs) with diameters 1 km and larger, and one estimates that there may be of the order of 100,000 NEAs with diameters exceeding 140 m. Land and water impacts of NEAs with diameters between 100 m and 500 m will cause major damages. Governments and international organizations are becoming increasingly concerned with natural hazards and disasters. The International Council for Science (ICSU) is developing a new program on “Natural and human-induced hazards and disasters” with participation from a large number of its scientific Unions. An adequate survey of Near Earth Objects (NEOs) is of notable interest and importance in such an initiative. A rapid development of NEOs survey programs illustrates the increased interest for detecting, tracking, characterizing and cataloging this family of bodies in our solar system. The first of four 2-m telescopes for such a survey program, the University of Hawaii Panoramic Survey Telescope and Rapid Response System (Pan-STARRS), will be operative in 2007. The planned Large Synoptic Survey Telescope (LSST) in Cerro Pachon, Chile, will further enhance the discovery rate of NEOs. One may also note that NASA has recently modified its charter to stress its increased responsibility for discovery and characterization of NEOs. The discoveries of NEAs that will be “interesting” to the public and media may increase from about one per year to very possibly one per week. Based on preliminary orbit calculations, as much as a dozen of these may initially appear to pose a potential threat. The IAU has been and will continue to be the primary international scientific organization with expertise on NEOs.

The greatly increased discovery rate of NEAs will inevitably lead to an increased interest in characterization and studies of them. Calculation of precise orbits and determination of impact probabilities for potentially hazardous NEAs will in the very near future require a matching attention and augmentation in support. The IAU has the obligation to encourage its National Members to support and safeguard these important scientific activities. The IAU has for several decades assumed responsibility for the IAU Minor Planet Center, hosted at the Smithsonian Astrophysical Observatory (SAO), with the important task of recording and maintaining the inventory of small bodies in the solar system,

which constitutes an important service to our community at large. A new Memorandum of Agreement between the IAU and SAO was signed in June 2006, which will ensure continued operation of the MPC with funding from NASA.

The IAU is pleased to note SAO's willingness and intention to revise and upgrade the operations of the MPC, in order to meet the need to cope with up to a hundred-fold increase in incoming data. One byproduct of the increasingly improved NEO surveys will be the finding of many new faint comets which concerns the IAU through their scientific value and interest.

With its responsibility for safeguarding and coordination of the science of astronomy in all its aspects, the IAU is the obvious organization and authority to be undertaking a sober and quality controlled information, on the matter of potential NEA threats to the Earth, to the public, to media and to governments. Therefore, the IAU Executive Committee has created an EC Advisory Committee on Hazards of Near-Earth Objects, to enable the IAU President and General Secretary to respond quickly to media and the public, as well as to governmental and international organizations, on incidents of Near-Earth asteroids and comets. This Committee will conduct its duties in accordance with the following rules and restrictions:

- Committee members will keep each other informed and will share information.
- Non-urgent communications to the IAU will be based on committee consensus.
- Urgent communications should represent a committee consensus, but can be initiated by a minimum of 2 (two) committee members.
- The committee will establish a public web page to be used for both general and urgent information.

The site will cross-link to the official IAU web site and to the primary CEO web site (JPL, Pisa, MPC, etc.).

- Urgent statements on behalf of the IAU can be posted by a minimum of 2 committee members. All urgent messages will also be sent by e-mail to the IAU President and General Secretary.
- The NEO web page will provide a historical record of IAU statements, including, for example, both original statements and subsequent modifications.
- The Committee will not issue IAU press releases or hold press conferences, but it will assist IAU in press issues, if requested.
- Interaction with governments on issues of impact threats is under the sole control of the IAU President and General Secretary.

Oddbjørn Engvold, IAU past-GS (adapted from article in Proceedings IAU Symposium 236), Oslo, Norway, October 2006

3.5.2. *EC Working Group on the International Year of Astronomy 2009*

The IAU Executive Committee, in its 81st meeting, during the IAU XXVI General Assembly, has approved the establishment of an *EC Working Group on the International Year of Astronomy 2009*.

President: Catherine J. Cesarsky (IAU President) <ccesarsk@eso.org>.

Members: E. Ian Robson (UK), Dennis Crabtree (Canada), Lars Lindberg Christensen (Denmark, ESA/ESO), Claus Madsen (ESO), Norio Kaifu (Japan), Tim Slater (USA).

URL: <<http://www.astronomy2009.org>>

Rationale: see section 3.5.2.1. below

3.5.2.1. *IAU Press Release, 27 October 2006*

<<http://www.iau2006.org/news/iau0606.html>>

“The International Astronomical Union announces the International Year of Astronomy 2009

27-October-2006, Munich: The International Astronomical Union will be coordinating the International Year of Astronomy in 2009. This initiative is an opportunity for the citizens of Earth to gain a deeper insight into astronomy’s role in enriching all human cultures. Moreover, it will serve as a platform for informing the public about the latest astronomy discoveries while emphasizing the essential role of astronomy in science education.

In 1609, Galileo Galilei first turned one of his telescopes to the night sky and made astounding discoveries that changed mankind’s conception of the world forever: mountains and craters on the Moon, a plethora of stars invisible to the naked eye and moons around Jupiter. Astronomical observatories around the world promise to reveal how planets and stars are formed, how galaxies assemble and evolve, and what the structure and shape of our Universe actually are. Today, humans are in the middle of a new age of discovery, one as profound as the one Galileo ushered in when he turned his telescope on those glorious star-filled nights 400 years ago.

Astronomy, the oldest science in history, has played an important role in most, if not all, cultures over the ages. Thanks to advanced telescopes and space probes, astronomy continues to be a trailblazer, enhancing our knowledge by delivering breathtaking discoveries almost on a weekly basis. The International Year of Astronomy 2009 (IYA2009) will be a global celebration of astronomy and its contributions to society and culture, stimulating worldwide interest not only in astronomy, but in science in general, with a particular slant towards young people. The IYA2009 is deemed to mark the monumental leap forward that followed Galileo’s first use of the telescope for astronomical observations, and portray astronomy as a peaceful global scientific endeavour that unites astronomers in an international, multicultural family of scientists working together to find answers to some of the most fundamental questions that humankind has ever asked.

The vast majority of IYA2009 activities will span local, regional and national levels. Several countries have already formed National Nodes to work on the planning and preparation of activities for 2009. These committees are collaborations between professional and amateur astronomers, science centres and science communicators. Individual countries will be undertaking their own initiatives as well as assessing their own national needs, while the IAU will be acting as the event's coordinator and catalyst on a global scale. The IAU plans to liaise with, and involve, as many as possible of the ongoing outreach and education efforts throughout the world, including those organized by amateur astronomers.

Despite the IYA2009 being still in its early planning stages, a number of very exciting ideas have already been put forward. One of the core ideas is to bring Astronomy closer to all citizens of planet Earth by giving them the opportunity to interact with amateur and professional astronomers, as well as to participate in "sidewalk astronomy" events in planetariums and public observatories where several different activities, such as looking through a telescope and observing our Universe, will be held.

As important an objective is to ensure that less well-established organizations from the developing world can become involved with larger organizations and deliver their contributions, linked via a huge global network. Aiming at awakening the public awareness of astronomy and science in the developing countries, the IYA will, based on a resolution adopted by the UNESCO General Conference in 2005, be launching the Universe Awareness (UNAWE) program in 2009. Such a scheme has been designed to broaden the minds of economically disadvantaged young children across the globe, enhance their understanding of the world and demonstrate the power of rational thought.

The IYA2009 is, first and foremost, an activity for the citizens of Planet Earth, which will convey the excitement of personal discovery, the pleasure of sharing fundamental knowledge about the Universe and our place in it and ultimately, the value of the scientific culture.

Contact:

Catherine Cesarsky, President; Karel A. van der Hucht, General Secretary; and Lars Lindberg Christensen, IAU Press Officer, <lars@eso.org>."

3.5.2.2. *Universe Awareness for Young Children (UNAWE)*

Steering Committee: Claus Madsen (ESO), George K. Miley (the Netherlands), Carolina J. Ödman (the Netherlands), and Cecilia Scorza (Germany).

UNAWE is an activity designed to expose economically disadvantaged young children, aged between 4 and 10 years, to inspirational aspects of astronomy. By conveying a feeling for the scale and beauty of the Universe the main goal of UNAWE is to broaden the minds of young children, thereby helping to form tolerant and internationally minded adults. Additional goals of UNAWE are to enhance the children's understanding of the world and to demonstrate the power of rational thought.

2

From the dawn of history, the beauty of the sky and its intimate connection with the development of human civilization have inspired countless generations with a sense of wonderment. Modern astronomy continues to play a unique role in conveying the excitement of science to the general public. In recent years considerable resources have been devoted to astronomical outreach in developed countries, aided by the spectacular images produced by modern astronomical facilities and the continuing list of major astronomical discoveries that have changed our views of the Universe. Universe Awareness is targeted at a group that has often been neglected by such outreach programs, namely children from 4 years upwards.

Astronomy is a unique discipline for inspiring very young children and imbuing them with an appreciation of both science and culture. Not only does astronomy involve the natural sciences and cutting-edge technology, it also has strong links to philosophy, the arts and human development.

UNAWE is motivated by the premise that access to simple knowledge about the Universe is a birth right and that the formative ages of 4 to 10 years play a crucial role in the development of our human value system. This is also the age range in which children can readily appreciate and enjoy the beauty of astronomical objects and can learn to develop a 'feeling' for the vastness of the Universe. Moreover, the effect of background-dependant disparities on educational development increases with age. We decided to focus on economically disadvantaged children, because they are less likely to gain knowledge of the Universe by other formal or informal means and are therefore most needy.

UNAWE is being developed as a bottom-up programme. We shall carry out or participate in projects in several countries starting in 2009, proclaimed as the *International Year of Astronomy 2009* by the IAU and UNESCO. Ingredients of the programme include the development of country-specific materials, the provision of training and the initiation of an international network for communication by teachers and others involved in the programme. The emphasis of UNAWE is on inspiration and entertainment rather than on imparting dry facts. Songs, games, toys and animation films will play a key role in the UNAWE programmes. These will be developed by professionals, with experience of children's needs. Where appropriate we shall exploit possibilities of school twinning to reinforce the goals of the programme.

Young disadvantaged children, the target group for Universe Awareness, live in diverse environments, including isolated rural villages and the centres of large cities. Different materials and methods and approaches will be developed for the disparate environments. UNAWE will proceed according to the needs of teachers and others in the various UNAWE participating countries and the demands of active coordinators in these countries. We shall work towards integrating Universe Awareness into other relevant programmes that already exist.

Universe Awareness was initiated in early 2004 and launched officially at the IAU General Assembly at Prague in August 2006. At present UNAWE has contacts, collaborators and contributors in the following countries: Chile, Colombia, Denmark, France, Germany, India, Indonesia, Ireland, Italy, the Netherlands, South Africa, Spain, Sweden, Tunisia, Ukraine, the United Kingdom, the United States of America and Venezuela. During 2006 successful pilot projects were carried out to investigate the feasibility of UNAWE in Venezuela and Tunisia. These projects were enthusiastically received. Logistics and funding will limit UNAWE programmes initially to a limited number of languages and target-regions. In 2009 we plan to implement full UNAWE programmes in at least four emerging countries and several disadvantaged regions (e.g., inner cities) of EU member states.

The development phase of the programme is being supported by several organizations, including ESO and the Dutch Ministry for Education, Culture and Science. The Ministry has recently provided funding for three years to support an International UNAWE Office at Leiden, consisting of a project manager and a media development coordinator. We envisage that the implementation of UNAWE will be funded by a combination of international and national sources and various possibilities are presently being investigated.

The IAU has designated Universe Awareness as an important activity for the International Year of Astronomy. UNAWE has been endorsed by several distinguished scientists and international personalities, including several Nobel Prize winners. Universe Awareness will contribute to the development of a world scientific culture and correlate with the United Nations Millennium Development Goals (MDGs) in promoting universal primary education and gender equality in schools. Furthermore, we are working towards the adoption of UNAWE as a “flagship programme” by UNESCO.

We would welcome contact with people throughout the world who are involved in astronomical outreach to very young children, or who might be interested in Universe Awareness activities. All those interested please contact the UNAWE Programme Manager/ Coordinator, Dr. Carolina J. Ödman, Sterrewacht, Leiden University, the Netherlands <odman@strw.leidenuniv.nl>. For further information see <www.universeawareness.org>.

References

- [1] Miley, G.K., et al. 2005, Universe Awareness for Young Children, *The Messenger*, 121, September 2005, ISSN 0722-6691
- [2] Vosniadou, S., Brewer, W.F. 1992, Mental models of the earth: A study of conceptual change in childhood, *Cognitive Psychology*, 24, 535 – 585.

*George K. Miley, on behalf of the Universe Awareness International Steering Committee
Leiden, the Netherlands, 10 November 2006*

3.5.3. EC Working Group on IAU General Assemblies

The IAU Executive Committee, in its 82nd meeting, during the IAU XXVI General Assembly, has approved the establishment of an *EC Working Group on IAU General Assemblies*.

President: Jan Palous (XXVI GA Czech Rep. 2006) <palous@ig.cas.cz>.

Members: Richard N. Manchester (XXV GA Australia 2003), Daniela Lazzaro (XXVII GA Brazil 2009), Gang Zhao (XXVIII GA China Nanjing 2012), and Karel A. van der Hucht (IAU GS, ex officio).

Rationale:

In order to retain and share experience in the organization of IAU General Assemblies by National and Local Organizing Committees, and to be available for advice to the NOC/LOC of the next IAU General Assembly, the EC has established as advisory body an EC Working Group on IAU General Assemblies.

One of the tasks of the EC-WG will be to prepare and maintain a *cook book* for the organization of IAU General Assemblies. The EC-WG will have access to all relevant documentation of past IAU General Assemblies, as far as available at the IAU Secretariat.

The membership of the EC Working Group on IAU General Assemblies will consist of one representative of each NOC/LOC of recent past and future IAU General Assemblies. The chair should be from the most recent IAU GA.

3.6. IAU Press Office and Press Officer

The IAU Executive Committee, in its 82nd meeting, during the IAU XXVI General Assembly, has approved the establishment of an IAU Press Office and the appointment of an IAU Press Officer, in order to assist the IAU President and IAU General Secretary with urgent press issues.

The first IAU Press Officer, Lars Lindberg Christen <lars@eso.org>, appointed preliminary for the year 2006/2007, started his work in this function right before the IAU XXVI General Assembly in Prague, and made himself most useful during and after the GA, notably in the planet definition press issues, and currently in press issues for the International Year of Astronomy 2009 (see section 3.5.2.1).

4. DIVISIONS, COMMISSIONS, WORKING GROUPS AND PROGRAM GROUPS

4.1. Presidents, Vice-Presidents and Organizing Committees 2006-2009

4.1.1. *DIVISION I - Fundamental Astronomy*

URL: <astro.cas.cz/iaudiv1>

PRESIDENT

Jan Vondrák

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VICE-PRESIDENT

Dennis D. McCarthy

US Naval Observatory (USNO)
3450 Massachusetts Avenue NW
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Phone: +1 202 762 1837
Fax: +1 202 762 1563
Email: <dmc@maia.usno.navy.mil>

MEMBERS DIVISION I ORGANIZING COMMITTEE

Aleksander Brzezinski, P-C19 (Poland), Joseph A. Burns, P-C7 (USA), Pascale Defraigne, P-C31 (Belgium), Dafydd Wyn Evans, VP-C8 (UK), Toshio Fukushima, P-C4, PP (Japan), George H. Kaplan, VP-C4 (USA), Sergei A. Klioner, P-C52 (Germany), Zoran Knezevic, VP-C7 (Serbia) Irina I. Kumkova, P-C8 (Russian Federation), Chopo Ma, VP-C19 (USA), Richard N. Manchester, VP-C31 (Australia), and Gérard Petit, VP-C52 (France).

PARTICIPATING COMMISSIONS

Div. I/Comm. 4 *Ephemerides*

P: Toshio Fukushima, PP, (Japan), <Toshio.Fukushima@nao.ac.jp>.
VP: George H. Kaplan, (USA), <gkaplan@usno.navy.mil>.
OC: Jan Vondrak (Czech Rep.), Catherine Hohenkerk (UK), John A. Bangert (USA), Sean E. Urban (USA), Jean-Eudes Arlot (France), Martin Lara (Spain), and Elena V. Pitjeva (Russian Federation).
URL: <http://iau-comm4.jpl.nasa.gov/>

Div. I/Comm. 7 *Celestial Mechanics and Dynamical Astronomy*

P: Joseph A. Burns (USA), <jab16@cornell.edu>.
VP: Zoran Knezevic (Serbia), <zoran@aob.bg.ac.yu>.
S: David Vokrouhlicky (Czech Rep.), <vokrouhl@mbox.cesnet.cz>
OC: Evangelia Athanassoula (France), C. Beauge (Argentina), B. Erdi (Hungary), A. Maciejewski (Poland), R. Malhotra (USA), Andrea

Milani, PP (Italia), A. Morbidelli (France), S.J. Peale (USA), and Ji-Lin Zhou (China Nanjing).

URL: <<http://copernico.dm.unipi.it/comm7>>

Div. I/Comm. 8 *Astrometry*

P: Irina I. Kumkova (Russian Federation), <kumkova@iperas.nw.ru>.

VP: Dafydd Wyn Evans (UK), <dwe@ast.cam.ac.uk>.

OC: Alexandre H. Andrei (Brazil), Alain Fresneau (France), Imants Platais (USA), Petre P. Popescu (Romania), Ralf-Dieter Scholz (Germany), Mitsuru Soma (Japan), Norbert Zacharias (USA), and Zi Zhu (China Nanjing).

URL: <http://www.ast.cam.ac.uk/iau_comm8/>

Div. I/Comm. 19 *Rotation of the Earth*

P: Aleksander Brzezinski (Poland), <alek@cbk.waw.pl>.

VP: Chopo Ma (USA), <cma@virgo.gsfc.nasa.gov>.

OC: Patrick Charlot (France), Pascale Defraigne (Belgium), Véronique Dehant (Belgium), Jean O. Dickey (USA), Chengji Juang (China Nanjing), Jean Souchay (France), and Jan Vondrák (Czech Rep).

URL: <<http://www.astro.oma.be/IAU/>> (tbd)

Div. I/Comm. 31 *Time*

P: Pascale Defraigne (Belgium), <Pascale.Defraigne@oma.be>.

VP: Richard N. Manchester (Australia), <Dick.Manchester@csiro.au>.

OC: Mizuhiko Hosokawa (Japan), Sigfrido Leschiutta (Italia), Demetrios Matsakis (USA), Gérard Petit (France), and Zhai ZaoCheng (China Nanjing).

URL: <<http://www.astro.oma.be/IAU/COM31/>>

Div. I/Comm. 52 *Relativity in Fundamental Astronomy*

P: Sergei A. Klioner (Germany), <Sergei.Klioner@tu-dresden.de>.

VP: Gérard Petit (France), <gpetit@bipm.org>.

OC: Viktor A. Brumberg (Russian Federation), Nicole Capitaine (France), Agnès Fienga (France), Toshio Fukushima (Japan), Bernard R. Guinot (France), Cheng Huang (China Nanjing), Francois Mignard (France), Kenneth P. Seidelmann (USA), Michael H. Soffel (Germany), and Patrick T. Wallace (UK).

URL: <<http://astro.geo.tu-dresden.de/RIFA>>.

DIVISION I WORKING GROUPS

Div. I/WG *Second Realization of International Celestial Reference Frame*

Chair: Chopo Ma (USA), <cma@gemini.gsfc.nasa.gov>

URL: <tbd>

Div. I/WG *Numerical Standards in Fundamental Astronomy*

Chair: Brian J. Luzum (USA), <bjl@maia.usno.navy.mil>

URL: <<http://maia.usno.navy.mil/NSFA.html>>.

Div. I/WG Astrometry by Small Ground-Based Telescopes

Chair: William Thuillot (France) <thuillot@imcce.fr>

URL: <http://www.imcce.fr/hosted_sites/iau_wgnps/astrom.html>

DIVISION I INTER-DIVISION WORKING GROUPS

Div. I-III/WG Cartographic Coordinates and Rotational Elements

Chair: Brent A. Archinal (USA), <barchinal@usgs.gov>

URL: <<http://astrogeology.usgs.gov/Projects/WGCCRE/>>**Div. I-III/WG Natural Satellites**

Chair: Jean-Eudes Arlot (France), <Jean-Eudes.Arlot@obspm.fr>

URL: <http://www.imcce.fr/host/iau_wgnps/iauwg.html>

DIVISION I COMMISSION WORKING GROUPS

Div. I/Comm. 8/WG Densification of the Optical Reference Frame

Chair: Norbert Zacharias (USA), <nz@usno.navy.mil>

URL: <http://ad.usno.navy.mil/dens_wg/dens.html>**Div. I/Comm. 19/WG High-frequency and Sudden Variations in Earth Orientation**

Chair: Markus Rothacher (BRD), <rothacher@bv.tum.de>

URL: <<http://www.astro.oma.be/IAU/>>**4.1.2. DIVISION II -Sun and Heliosphere**URL: <<http://www2.bc.edu/~haganmp/IAUDivII.htm>>**PRESIDENT****Donald B. Melrose**

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Lidia van Driel-Gesztelyi, VP-C10 (France),

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MEMBERS DIVISION II ORGANIZING COMMITTEE

David F. Webb, PP (USA), James A. Klimchuk, P-C10 (USA),

Alexander Kosovichev, VP-C12 (USA), Jean-Louis Bougeret, P-C49

(France), and Rudolf von Steiger VP-C49 (Switzerland).

PARTICIPATING COMMISSIONS

Div. II/Comm. 10 *Solar Activity*

P: James A. Klimchuk (USA), <james.klimchuk@nrl.navy.mil>.
 VP: Lidia van Driel-Gesztelyi (France), <Lidia.vanDriel@obspm.fr>.
 S: Karel J. Schrijver (USA), <schryver@lmsal.com>. OC: Donald B. Melrose, PP (Australia), Lyndsay Fletcher (UK), Nat Gopalswamy (USA), Richard A. Harrison (UK), Cristina H. Mandrini (Argentina), Hardi Peter (Germany), Saku Tsuneta (Japan), Bojan Vrsnak (Croatia), and Jingxiu Wang (China Nanjing).
 URL: <tbd>

Div. II/Comm. 12 *Solar Radiation and Structure*

P: Valentin Martinez Pillet (Spain), <vmp@iac.es>.
 VP: Alexander Kosovichev (USA), <sasha@quake.stanford.edu>.
 S: John T. Mariska (USA), <mariska@nrl.navy.mil>.
 OC: Martin Asplund (Australia), Thomas J. Bogdan (USA), Gianna Cauzzi (Italy), Jørgen Christensen-Dalsgaard (Denmark), Lawrence E. Cram (Australia), Weiqun Gan (China Nanjing), Laurent Gizon (Germany), Petr Heinzel (Czech R.), Marta G. Rovira (Argentina), and P. Venkatakrishnan (India).
 URL: <tbd>

Div. II/Comm. 49 *Interplanetary Plasma and Heliosphere*

P: Jean-Louis Bougeret (France), <Jean-Louis.Bougeret@obspm.fr>.
 VP: Rudolf von Steiger (Switzerland), <rudolf.vonsteiger@issibern.ch>.
 OC: Subramanian Ananthakrishnan (India), Hilary V. Cane (Australia), Nat Gopalswamy (USA), Stephen W. Kahler (USA), Rosine Lallement (France), Blai Sanahuja (Spain), Kazunari Shibata (Japan), Marek Vandas (Czech R.), Frank Verheest (Belgium), and David F. Webb, PP (USA).
 URL: <tbd>

DIVISION II WORKING GROUPS

Div. II/WG *Solar Eclipses*

Chair: Jay Pasachoff (USA), <jay.m.pasachoff@williams.edu>
 URL: <http://www.williams.edu/Astronomy/IAU_eclipses/>

Div. II/WG *Solar and Interplanetary Nomenclature*

Chair: Edward W. Cliver (USA), <Edward.Cliver@hanscom.af.mil>
 URL: <<http://www2.bc.edu/~haganmp/Nomenclature.htm>>

Div. II/WG *International Solar Data Access*

Chair: Robert Bentley (UK), <rdb@mssl.ucl.ac.uk>
 URL: <http://www.mssl.ucl.ac.uk/grid/iau/DivII_WG_IntDataAccess.html>

Div. II/WG *International Collaboration on Space Weather*

Chair: David F. Webb (USA), <David.Webb@hanscom.af.mil>

URL:

<<http://www2.bc.edu/~haganmp/MAIN%20PAGE%20From%20IAU%20Page.htm>>**4.1.3. *DIVISION III - Planetary Systems Sciences***URL: <<http://www.ss.astro.umd.edu/IAU/div3/>>**PRESIDENT****Edward L.G. Bowell**

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PARTICIPATING COMMISSIONS**Div. III/Comm. 15 *Physical Studies of Comets and Minor Planets***P: Walter F. Huebner (USA), <whuebner@swri.edu>.VP: Alberto Cellino (Italy), <Cellino@to.astro.it>.S: Daniel C. Boice (USA), <DBoice@SwRI.edu>.

OC: Dominique Bockelee-Morvan (France), Yuehua Ma (China Nanjing), Harold J. Reitsema (USA), Rita M. Schulz (Netherlands), Petrus M.M. Jenniskens (USA), Dmitrij F. Lupishko (Ukraine), and Gonzalo Tancredi (Uruguay).

URL: <<http://iau15.space.swri.edu>>

Div. III/Comm. 16 *Physical Study of Planets and Satellites*

P: Régis Courtin (France), <Regis.Courtin@obspm.fr>.

VP: Melissa A. McGrath (USA), <melissa.a.mcgrath@nasa.gov>.

S: Luisa M. Lara (Spain), <lara@iaa.es>.

OC: Carlo Blanco (Italy), Guy J. Consolmagno (Vatican City State), Leonid V. Ksanfomality (Russian Federation), David Morrison (USA), John R. Spencer (USA), and Viktor G. Tejfel (Kazakhstan).

URL: <<http://www.iaa.es/IAUComm16>>

Div. III/Comm. 20 *Positions and Motions of Minor Planets, Comets and Satellites*

P: Julio A. Fernández (Uruguay), <julio@fisica.edu.uy>.

VP: Makoto Yoshikawa (Japan), <makoto@pub.isas.ac.jp>.

S: Steve Chesley (USA), <steve.chesley@jpl.nasa.gov>.

OC: Giovanni B. Valsecchi, PP (Italy), Yulia A. Chernetenko (Russian Federation), Alan C. Gilmore (New Zealand), Daniela Lazzaro (Brazil), Karri Muinonen (Finland), Petr Pravec (Czech Rep.), Timothy B. Spahr (USA), David J. Tholen (USA), Jana Tycha (Czech Rep.), and Jin Zhu (China Nanjing).

URL: <<http://www.astro.uu.se/IAU/c20/>>

Div. III/Comm. 21 *Light of the Night Sky*

P: Adolf N. Witt (USA), <awitt@dusty.astro.utoledo.edu>.

VP: Jayant Murthy (India), <jmurthy@yahoo.com>.

OC: W. Jack Baggaley (New Zealand), Eli Dwek (USA), Bo A.S. Gustafson (USA), A.-Chantal Levasseur-Regourd (France), Ingrid Mann (Japan), Kalevi Mattila (Finland), and Junichi Watanabe (Japan).

URL:

<http://www.astro.ufl.edu/~gustaf/IAUCom21/IAU_Com_21.html>

Div. III/Comm. 22 *Meteors, Meteorites and Interplanetary Dust*

P: Pavel Špurný (Czech R.), <spurny@asu.cas.cz>.

VP: Jun-ichi Watanabe (Japan), <jun.watanabe@nao.ac.jp>.

S: Jiri Borovicka (Czech Rep.), <borovic@asu.cas.cz>.

OC: William J. Baggaley (New Zealand), Peter G. Brown (Canada), Guy J. Consolmagno (USA), Petrus M.M. Jenniskens (USA), Asta K. Pellinen-Wannberg (Sweden), Vladimir Porubcan (Slovakia), Iwan P. Williams (UK), and Hajime Yano (Japan).

URL: <<http://meteor.asu.cas.cz/IAU/>>

Div. III/Comm. 51 *Bio-Astronomy*

P: Alan P. Boss (USA), <boss@dtm.ciw.edu>.

VP: William M. Irvine (USA), <irvine@fcrao1.astro.umass.edu>.

OC: Cristiano Cosmovici (Italy), Pascale Ehrenfreund (Netherlands), Karen J. Meech, PP (USA), David W. Latham (USA), David Morrison (USA), and Stephane Udry (Switzerland).

URL: <<http://www.dtm.ciw.edu/boss/c51index.html>>

Div. III/Comm. 53 *Extrasolar Planets*

P: Michel Mayor (Switzerland), <michel.mayor@obs.unige.ch>.

VP: Alan P. Boss (USA), <boss@dtm.ciw.edu>.

OC: Paul Butler (USA), William B. Hubbard (USA), Philip A. Ianna (USA), Martin Kuerster (Germany), Jack J. Lissauer (USA), Karen J. Meech (USA), François Mignard (France), Allan Penny (UK), Andreas Quirrenbach (Germany), Jill C. Tarter (USA), and Alfred Vidal-Madjar (France).

URL: <tbd>

DIVISION III WORKING GROUPS

Div. III/WG *Committee on Small Bodies Nomenclature (CSBN)*

Chair: Jana Tichá (Czech Republic), <jticha@klet.cz>

S: Brian Marsden (USA), <bmarsden@cfa.harvard.edu>

URL: <<http://www.ss.astro.umd.edu/IAU/csbn/>>

Div. III/WG *Planetary System Nomenclature (WG-PSN)*

Chair: Rita M. Schulz (Netherlands), <rschulz@rssd.esa.int>

URL: <<http://planetarynames.wr.usgs.gov/append1.html>>

DIVISION III INTER-DIVISION WORKING GROUPS

Div. III-I/WG *Cartographic Coordinates and Rotational Elements*

Chair: Brett A. Archinal (USA), <barchinal@usgs.gov>

URL: <<http://astrogeology.usgs.gov/Projects/WGCCRE/#wgm>>

Div. III-I/WG *Natural Satellites (formerly Div. III-C20 WG)*

Chair: Jean-Eudes Arlot (France), <Jean-Eudes.Arlot@obspm.fr>

URL: <http://www.imcce.fr/host/iau_wgnps/iauwg.html>

DIVISION III COMMISSION WORKING GROUPS

Div. III/Comm. 15/WG *Physical Studies of Comets*

Chair: Tetsuo Yamamoto (Japan), <TY@lowtem.hokudai.ac.jp>

URL: <http://atlas.sr.unh.edu/IAU_Comm15/>

Div. III/Comm. 15/WG *Physical Studies of Minor Planets*

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URL: <http://atlas.sr.unh.edu/IAU_Comm15/>

Div. III/Comm. 20/ *Service Minor Planet Center (MPC)*

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URL: <<http://cfa-www.harvard.edu/iau/mpc.html>>

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