# INTERNATIONAL ASTRONOMICAL UNION 

## 84th EXECUTIVE COMMITTEE MEETING 28-30 May 2008 <br> Oslo, Norway

DRAFT MINUTES v-1
(25 June 2008)

## EXECUTIVE COMMITTEE

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Paul G. Murdin
IAU XXVII GENERAL ASSEMBLY NOC CO-CHAIR
Daniela Lazzaro

## EXECUTIVE ASSISTANT

Vivien A. Reuter

## 0. WELCOME BY PROF. OLE DIDRIK LARUM, PRESIDENT OF THE ACADEMY

The President of the Norwegian Academy of Science and Letters (DNVA), Professor. Ole Didrik Larum welcomed the members of the IAU Executive Committee, the IAU Executive Assistant, the IAU Division Presidents, the Chair of the IAU Finance Sub-Committee, and the Co-Chair of the NOC of the IAU XXVII GA, in the headquarters of the DNVA, also on behalf of Professor Reidun Sirevåg, Secretary General of the DNVA, Mr. Øyvind Sørensen, Chief Executive of the DNVA, Mr. Birger Kruse, director of the Faculty of Mathematics and Natural Science of the University of Oslo, Prof. Kaare Aksnes, Chair of the Norwegian National Committee for Astronomy, and our host Oddbjørn Engvold, past-GS and emeritus-professor of the Institute of Theoretical Physics of the University of Oslo.

## 1. OPENING BY THE PRESIDENT OF THE IAU

The IAU President, Catherine, J. Cesarsky, opened EC84 at 09:00 hr, with words of thanks to our hosts, in particular to past-GS Oddbjørn Engvold for handling the local organization. She asked for a roll-call, allowing all participants to introduce themselves. The president of Division XI could be present only on the second and third day of the meeting. The President described the work for the DPs, notably

- to select a spokesperson among themselves for communication with the GS;
- the select/propose the Invited Discourses for the IAU XXVII GA;
- to re-address the selection of the IAU scientific meetings in 2009 within and outside the GA, with emphasis on involving astronomers in host country/region and on broader coverage of all fields of astronomy;
- find possible connections of GA with IYA2009.

The GS asked the DPs to select next to the six GA Symposia: 16 JDs plus two in reserve, and 8 SpSs plus two in reserve.

## 2. LATE DOCUMENTS, LATE-LATE DOCUMENTS. APPROVAL OF THE AGENDA

Documents: < ftp://ftp.sron.n//pub/karelh/UPLOADS/IAU.dir/EC84-docs.dir/ > .
Late documents: < ftp://ftp.sron.n//pub/karelh/UPLOADS/IAU.dir/EC84-late-docs.dir/ > .
Late-Late documents: < ftp://ftp.sron. $\mathrm{nl} /$ pub/karelh/UPLOADS/IAU.dir/EC84-late-late-docs.dir/ > .
The agenda was approved.

## 3. EXECUTIVE COMMITTEE

### 3.1. Draft minutes EC83 (doc)

The minutes were approved.

### 3.2. Draft minutes OM2008 (doc)

The minutes were approved.

### 3.3. Open action items EC83 and OM2008

### 3.3.1. Open action items EC83 (doc)

AI-EC83-2 on GS: Ask IAU NCA chairpersons to suggest candidate members for the SNC, as input for the selection of the four SNC members by the Division Presidents. Due date: March 2008.

AI-EC83-3 = \# ad AI-OM07-4 on GS:

Ask Division Presidents to provide EC not less than 3 months before Rio GA2009 (and EC85) with a list of 12 nominees to the SNC. The EC should then ask National Committee to select 4 nominees from this list of 12 to be submitted to GA2009.

AI-EC83-7 on AGS: Urge Invited Speakers, who accept to speak at GA 2009, to commit themselves to participate duly. Due date: March 2009.

## AI-EC83-11 = \# AI-OM07-14 (revised) on AGS, EC, PO.

Plan with IAU PO and GA2009 PR/organisers to ensure that there are 'major announcements' every day. The proposed methodology is for the various symposium organisers to submit potential PR topics to AGS, who will review and put to whole EC to select the favoured topics. EC will ask AGS to produce, with Press Office assistance, a PR programme to be discussed and agreed with Local Organisers. Note that "Hot Topics" must be included, and any late Hot Topics should be given careful consideration.
Due date: Progressive, but done by end July 2009.
AI-EC83-21 = \# AI-OM07-28 on VPs.
Seek and approach individual contacts in potential member countries and write to suspended countries. Due date: Progressive.

AI-EC83-25 on GS: Arrange for the signing of the MoU between IAU and UNESCO WHC on the Initiative "Astronomy and World Heritage". Due date: asap. [In progress: revised MoU received 5 December 2007, see 11.1]

AI-EC83-37 on GS/chair C46: Draft an IAU e-Newsletter soliciting student participation in the organization of the GA 2009 Young Astronomers Events. Due date: October 2008. [done]

AI-EC83-38 on GS: In communication with presidents of IAU Divisions, Commissions and chair persons of Working Groups / Program Groups, ask for input on strategy ideas for the Union. Due date: progressive.

### 3.3.2. Open action items OM2008 (doc)

AI-OM08-3 = AI-EC83-18 on GS: Solicit, together with EC Finance Sub-Committee chair Paul Murdin, proposals from Paris-based internationally operating banks, to handle the IAU accounts and the investment of IAU reserves in excess of CHF 500,000.-. Due: October 2007. [In progress. PM has written a RPF. GS has written to four Paris-based international banks on 7 November 2007: HSBC, LCL, BNP-Parisbas and CIC. No response. GS will make personal contacts, including Barcleys]

## AI-OM08-14 on AGS \& GS:

As soon as the IAU data base managers are ready for this, the IAU Scientific Meeting Proposal Server, presently in Oslo, and the Authors and Editors Instructions ftp-site Server, presently in Utrecht, will migrate to the IAU computers in Garching, BRD. This could be completed by May 2008. Due: May 2008.

### 3.4. Naming Pluto-like category. Naming Committee (doc)

## CJC reports:

- Div.III/CSBN has done its job, and proposed the category name plutoid for Pluto-like objects.
- Naming issue: explanatory chapter for laymen, written by Lars Lindberg Christensen on request of CJC, was on IAU web but has temporarily been removed.
- Bowell, president Div.III:
-- wanted a Working Group on hydrostatics; now we have the Tancredi paper (3.4.1);
-- mentions that mass should as yet be a criterion;
-- reports that a minority wants to get rid of category name dwarf planet; replace perhaps by subplanet? ;
-- reports that the definition given in the email message of Bob Williams 14 April (Docs, p. 56) has been approved by the Div. III Board;
-- recommends not to introduce category name ceroid, because only one is known: Ceres;
-- will write explanatory supplements on planet definition and category names for professionals and laymen, to be put on IAU web site.
- Exoplanets:
-- Div.III/Comm. 53 on Extrasolar Planets has a working definition on their website (??).
-- an IAU resolution on exoplanet definition is not desirable. Suggested name for planetary mass object: planemo.
-- WG-PSN and CSBN will not name exoplanets.
In summary:
CSBN provided category name plutoid, Bob Williams arranged for the process, Ted Bowell provided the details, and now Press Officers Lars Lindberg Christensen can inform the press.
For the naming of individual plutoids, the following recommendation has been accepted:
"Any solar system body having
(a) a semimajor axis greater than that of Neptune, and
(b) absolute magnitude brighter than $\mathrm{H}=+1 \mathrm{mag}$
shall be considered for naming purposes to be a dwarf planet, and named jointly by the WG-PSN and CSBN. Name(s) proposed by the discoverers will be given deference."

AI-EC84-1 on P and PO: Phrase press release on category name plutoid and on naming requirements.
Due: asap. [Done. Press release 11 June 2008.]

### 3.4.1 $\quad$ Tancredi \& Favre, 2008, Icarus, Which are the dwarfs in the Solar System (late doc, to 14.3)

### 3.5. Special Nominating Committee (CJC) (oral)

CJC reports and states:

- incoming AGS and incoming P-E identified; incoming new VPs (3) not yet identified.
- it is important to properly brief the DPs on the SNC member selection procedure well in advance.

AI-EC84-2 on GS: Inform Division Presidents on procedure of selection of SNC members (Bye-Laws §lll.910) . Due: asap.

### 3.6. EC-WG on Hazards of Near-Earth Objects (doc)

The EC took with interest note of the message of EC-WG-NEO chair Morrison of 4 January 2008. There was unanimous support for the suggestion to extend the terms of reference of this EC-WG to hazards of all solar system planets, rather than just of the Earth.

AI-EC84-3 on GS: Arrange with EC-WG-NEO chair David Morrison an extension of the terms of reference of the IAU EC-WG to Hazards of all Solar System Planets. Due: asap.

## 4. REPORT ON THE SECRETARIAT

4.1. $\quad$ Personnel (oral)

On 22 January 2008 the IAU Executive Assistant, Monique Léger-Orine, passed away. All Officers, present in Paris for the Officer's Meeting 29-31 January, attended the cremation where the President spoke on behalf of the IAU. During the Officers's Meeting the Officers interviewed two candidates for the function of Executive Assistant and selected Mme Vivien A. Reuter. The GS spent February and March 2008 full time at the Secretariat to keep things running.
Mme Vivien A. Reuter, assumed her job on 1 March 2008. Since then she worked mainly on the accounts of the IAU finances 2006 and 2007, among other important tasks.

The local staff of the IAU Secretariat presently comprises: Mme Vivien A. Reuter, Executive Assistant, Mme Maiténa Mitschler, data base assistant, and Mme Ginette Rude, part-time archive assistant.
Maintenance and development of the IAU data base and website, contracted out to ESO, continue to be handled efficiently by Raquel Y. Shida, Lars Holm Nielsen and Luis Clara Gomes, under the (in-kind) guidance Lars Lindberg Christensen. The new IAU web site is online since 15 April 2008, see 4.2 below.

FSC chair Paul Murdin stated:

- that there is too much single point control of expenditure;

■ the IAU must implement a software accounting system, even if it costs money. The EC agreed;

- the IAU should routinely change auditor every ten years;
- the auditor's mandate should be reformulated. The auditor should be more creative.


### 4.2. Data base and web site upgrade (doc)

The GS explained the status of the previous IAU data base: over-designed (e.g., too many dynamic pages), no front-end, no manual or documentation left by Mrs. Vidonne (who resigned on 13 September 2006), and software written in French. The GS informed the EC of the (mostly in-kind) pre-support and pre-analyses by Lars Lindberg Christensen and Lars Holm Nielsen of ESA/Hubble at ESO. The EC accepted the proposal for a re-design of the IAU data base structure, starting in September 2007, for a price of $€ 10,000$.- in 2007 and $€ 10,000$.- in 2008.

Themes < http://www.iau.org/public_press/themes/ >: The President emphasized that the text on the IAU web pages of each of the popular astronomy Themes, as prepared by IAU Press Officer Lars Lindberg Christensen, must be approved by the president of the Division and/or Commission related to that Theme. All agreed.

AI-EC84-4 on GS ( = AI-OM08-2): Inform IAU Press Officer Lars Lindberg Christensen again that the text on the IAU web pages of each of the popular astronomy Themes must be approved by the president of the IAU Division and/or IAU Commission related to that Theme. Due: asap.

Web voting (not e-voting):
One should distinguish between e-voting (EC against) and web-voting (EC in favour). It appears that electronic voting is becoming less popular.

### 4.3. Report Web-DB Oversight Committee (late doc)

EC83 (May 2007) suggested to establish an "Oversight Committee" of data base experts, with members Martha Haynes, Ron Ekers, Ray Norris, and Francoise Genova, to overview the resulting functionality of the IAU web site. Oversight Committee chair Ray Norris submitted a very comprehensive and useful OC report to the GS on 26 May 2008, which was forwarded to our contractor at ESO. Most suggestions have been accepted and implemented in the meantime, and upgrading is continuing.

The GS will discuss with Lars Lindberg Christensen and Lars Holm Nielsen also aspects of introducing evoting software, with advice from P-E Bob Williams.

EC84 raised the issue of privacy of personal data of IAU Individual Members on the IAU web site, in relation to European law. PM: the IAU site must provide data protection in accordance with French law.

AI-EC84-5on GS and EA: Check on European legislation with respect to privacy issues related to web sites. Due: asap.

## 5. FINANCIAL MATTERS

### 5.1. $\quad$ Accounts 2006. Auditor report (doc)

The EC took note of the report. As FSC chair Paul Murdin stated, the report has to be reconsidered in view of the facts revealed since March 2008.
5.2. Draft accounts 2007
5.2.1. $\quad$ IAU 2007 income (late-late doc)
5.2.2. IAU 2007 expenditure (late-late doc)
5.2.3. IAU 2007 bank balance (late-late doc)
5.2.4. IYA2009 2007 income and expenditure (late-late doc)

The EC took note of the draft accounts 2007. GS, EA and FSC chair together will complete the accounts 2007, and inform the EC members at EC85 if not earlier, by email.

### 5.3. Status of dues payments by National Members (late doc)

The EC took note of the report.

### 5.4. Status of Category of Adherence of National Members (doc)

The EC was pleased to see that of the 28 National Members invited to step up their Category of Adherence to the IAU as of 2008, 12 National Members have responded positively.

### 5.5. Finding a Paris-based internationally operating bank (doc)

The EC took note of the report and is looking forward to progress.

### 5.6. Views of the FSC chair Paul G. Murdin on the IAU finances (oral)

Finance Sub-Committee chair Paul Murdin expressed its satisfaction with the status of the IAU reserves, the increases of Category of Adherence, and the level of the CUP royalties. The 2006 accounts, though approved by the auditor, and the 2007 accounts deserve further study. The study may affect the IAU accounts back to 1999.

## 6. STATUTES, BYE-LAWS, WORKING RULES

$\begin{array}{ll}\text { 6.1. } & \text { Changes in Statutes and Bye-Laws to be proposed to GA2009 (doc) } \\ \text { 6.1.r. } & \text { Changes in Statutes revised (late doc) }\end{array}$
Ad 6a: add "... it must apply to become a national member on a permanent basis or its membership will expire."
Ad 6b: add "... After six years, they must apply for one or the other. Otherwise it terminates". Agreed.

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6.2. Changes in Working Rules (doc)
6.2.r. \(\quad\) Changes in Working Rules revised (late doc)
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The EC took note of the documents, with thanks to P-E Bob Williams and AGS Ian Corbett who revised the IAU Statutes, Bye-Laws and Working Rules. The EC approved those. The proposed revisions of Statutes and Bye-Laws will be submitted to the National Members at least six months before the GA.

AI-EC84-6 on P-E: Mail revised versions of the Statutes, Bye-Laws and Working Rules to GS.
Due: asap. [done].

AI-EC84-7 on GS: Publish revised Working Rules, as approved by the EC, on the IAU web.
Due: asap. [done].
AI-EC84-8 on GS: Submit a specific proposal of revisions of Statutes and Bye-Laws, as approved by the EC, to the National Members (Statutes VII.16, Bye-Laws II.7a), to be considered by the General Assembly.
Due: 3 February 2009.

## 7. MEMBERSHIP OF THE IAU

### 7.1. News from National Members

### 7.1.1. Armenia (doc)

The ciurrent policy of Armenia to stay four years in arrear will hopefully change soon into a more positive dues-paying policy.

### 7.1.2. CAAA (doc)

The CAAA was suspended as IAU National Member in December 2002, and its National Membership was about to be terminated in December 2007. The CAAA was formally informed of this situation, implying that, if the CAAA would pay before 31 December 2007 its dues to the IAU over the five years 1997, 1998, 1999, 2000, and 2001, together CHF 7572.- , then, following the IAU Statutes, CAAA National Membership of the IAU would automatically be resumed. Indeed the IAU received
CHF 7572.- from the CAAA before the end of 2007.

However, the IAU Officers reconsidered the case of collective National Membership for the CAAA, and decided to abolish collective National Membership entirely. The CAAA will be informed accordingly, will be reimbursed for CHF 7572.-, and will be advised that the member states of the CAAA (Costa Rica, El Salvador, Honduras, Guatemala, Nicaragua, and Panama) should apply individually for IAU National Membership (full or interim).

AI-EC84-9 on GS: Inform the CAAA that the IAU EC has decided to abolish collective National Membership; that the CAAA qualifies for reimbursement of the back-payment of CHF 7572.-; and that the CAAA member states are encouraged to apply individually for IAU National Membership.
Due date: asap.

### 7.2. Information requested for new National Membership

7.2.1. Korea DPR (doc)
7.2.2. Nepal (doc)
7.2.3. $\quad$ Singapore (doc)
7.2.4. Bangladesh (doc)
7.2.5. Kazakhstan (doc)
7.2.6 Vietnam (doc)

The EC took note of the desire of the above mentioned countries to apply for National Membership of the IAU. North Korean astronomers participated in the ISYA 2007 in Malaysia. Since then there has been contact with C46/PG-TAD chair Ed Guinan on participation of North Korean astronomers in other regional astronomy schools and meetings. North Korea has presently 7 Individual Members. Nepal has no Individual Members yet, Singapore has 1, Bangladesh has 0, Kazakhstan has 7, and Vietnam has 3.

### 7.3. Requirements and procedure for accepting new National Members (doc)

The EC accepted the following text for the requirements and the procedure to apply for IAU National Membership:

## NATIONAL MEMBERSHIP IN THE IAU

* The IAU welcomes National Membership for any country that wishes to promote astronomy. National Membership resides with an organization that represents the professional astronomical community of that country The organization makes application for membership to the IAU General Secretary, at least eight months before the next IAU General Assembly. The General Secretary forwards the application to the Executive Committee for its recommendation to the next IAU General Assembly. (IAU Statutes §IV.5-10, Bye-Laws §I.1-2, Working Rules §II.1-2).
* The IAU Executive Committee bases its decision on information that is provided by the national organization, and which should include:

1. A description of the organization requesting IAU National Membership, including its role in the astronomical activity of the country. The basic organizational structure, key personnel, and funding sources of the organization should be explained.
2. An overview of the professional astronomical activities in the country for the past six years, including a listing of its astronomical institutes, its number of professional astronomers, and its astronomical or astronomical related projects. Submission of available annual reports is encouraged.
3. A plan for the development of astronomical research and education of the country concerned in the coming six years.
4. The class of IAU National Membership the country is seeking, and the Category of Adherence to which it wishes to adhere (Bye-Laws §VII.25).
*The IAU Executive Committee would appreciate knowing of specific benefits to local astronomical activity and development that are expected by the national member from its membership in the Union.

Requests for information and expressions of interest in National Membership should be addressed to: IAU General Secretary, International Astronomical Union, 98 bis blvd. Arago, F-75014 Paris, France, before 1 September 2008. Formal proposals are due before 1 December 2008.

AI-EC84-10 on GS: Prepare an IAU web page on National Membership application, including the approved text. Due date: asap.

AI-EC84-11 on GS: Inform the contact persons in Korea DPR, Nepal, Singapore, Bangladesh, Kazakhstan, Vietnam, Costa Rica, El Salvador, Honduras, Guatemala, Nicaragua, and Panama on the procedure and requirements for applying for IAU National Membership by mail, referring to the IAU web page on National Membership. Due date: asap.

## 8. IAU GENERAL ASSSEMBLIES

### 8.1. IAU XXVI General Assembly in Prague 2006. Follow-up issues

8.1.1. IAU XXVI GA NOC/LOC financial report dd. 15 October 2007 (doc)
8.1.2. Comments on the above from Oddbjørn Engvold (doc)

The EC took note of the reports with gratitude and satisfaction.
8.2. IAU XXVII General Assembly in Rio de Janeiro, 2009
8.2.1. $\quad$ Report EC delegation visit to Rio de Janeiro dd. 20-24 August 2007 (doc)
8.2.2. IAU XXVII GA NOC report dd. 12 December 2007 (doc)

The EC took with interest note of the reports.

### 8.2.3. Status of planning

8.2.3.1. IAU XXVII GA NOC report dd. 22 April 2008 (doc)

The EC took with interest note of the report.

### 8.2.3.2. Presentation by Daniela Lazarro, chair NOC (late-late doc)

-- The EC listened with much interest to the presentation by Daniela Lazzaro, co-chair of the IAU XXVII GA NOC (<.ppt file> available as late-late document).
-- The venue is Sul America Convention Center (SACC), wjich has a metro station across the street.
-- Venue for the Opening Ceremony (does not fit in SACC) still being sought. The Theatro Municipal is under reconstruction, completion expected in July 2009: too close for comfort. An other option could be the fortress dividing the beaches of Copacabana and Ipanema.
-- Other venues yet to be found: for Young Astronomers Lunch, Women's Lunch and GA banquet.
-- At Prague Women's lunch: any provisions for child care?
-- GA Journal chief-editor is João Steiner.
-- Registration fee will be frozen in October 2008.
-- Definition of "seniors" and "students" needs to be very clear and specific.
-- Teachers, amateurs: arrangements will have to be considered for reduced-fee access for teachers at C46 sessions, and for amateurs to the IYA2009 session.
-- Big headache to verify institutional affiliation of non-IAU-members.
-- The proposal of AGS Ian Corbett and CUP to add US\$95.- to the GA registration fee as pre-payment for a copy of one of the Proceedings of the GA was not favoured by the EC.
-- Pre-ordering of all GA proceedings (Symposia, Highlights, Transactions, GBP 48.- each) will be made possible via a link to CUP, available on the IAU XXVII GA registration form.
-- Hotels: booking agency requires full pre-payment. Past-GS Oddbjørn Engvold noted that such was requested also by the Prague GA2006 hotels, but that the Prague NOC/LOC negotiated with the hotel agencies and managed to get approved that participants prepaid only the first night by credit card, while the additional nights had to be paid on the spot. The Rio NOC is kindly requested to investigate whether the Rio hotel agencies are willing to accept the "Prague"-procedure.
-- Credit card issues: AGS Ian Corbett mentioned acceptation problems with credit card transfers to countries of risk. Participants should inform their banks before the transaction that they plan to make a credit card transaction to Brazil. Possible alternatives: bank transfers, PayPal.
-- The Abstract Server developed by Cesar Stauss will soon to be tested via the web.
-- President Catherine Cesarsky will write a «Welcome to the IAU XXVII GA»- chapter for IB 102.
-- Health \& Security: the IAU XXVII GA web site should have a page on «Health and Security», addressing dengue and safety among other issues. The text should by explicitly informative and at the same time not discouraging.
-- Exhibition: the IAU XXVII GA exhibition should have an IAU booth, an IYA2009 booth and a CUP booth.
-- No IAU meetings should be planned on Saturday 8 August and Sunday 9 August in the SACC.
-- The IAU XXVII GA NOC looks forward to the visit to Rio de Janeiro, 9-16 August 2008, of P-E Bob Williams, EA Vivien Reuter and GS Karel van der Hucht, in order to discuss details of the GA programme and organization.

AI-EC84-12 on P: Write «Welcome to IAU XXVII GA» message for IB 102. Due: asap. [Done 14-06-2008]
AI-EC84-13 on Daniela Lazzaro: Write «Health and Security» chapter for IAU XXVII GA web site. Due: asap.

### 8.2.4. Time table of due dates and events (late doc)

The EC took note of the document, which will require frequent updating on details.
8.2.5. Invited Discourses (late doc)
8.2.5.1. $\quad$ Past Invited Discourses (late doc)
8.2.5.2. $\quad$ Suggested names and topics for the three GA Invited Discourses (late doc)

The EC took note of the documents.

### 8.2.5.3. Selection of GA 2009 Invited Discourses (report by MH)

On Day 2 the VPs had their meeting on this topic, to discuss potential ID speakers. Requirements: high profile (senior / well known / understanding of context), good speaker (clear / energetic) with proper geographic/gender diversity. Topics should be of broad general interest, also for the media. Topics chosen (with candidate speakers):
-- 1. Water on planets
-- 2. Evolution of structure in the Universe
-- 3. Do low-luminosity stars matter?
-- 4. Telescopes from Galileo to the future

Steve Squyres (USA)
Carlos Frenk (UK/Mexico) or Neta Bahcall (USA)
Maria Teresa Ruiz (Chile)
Franco Pacini (Italia)

It was hard to suggest back-up speakers while maintaing an overall balance of topics and persons.
The suggestion by CJC for an historical talk on Galileo by Pacini is very appropriate. Note that Pacini was also was the inspiration for the IYA2009 concept.

RE suggested substitution of Simon White for Carlos Frenk, which was agreed.
No Asian/Pacific speaker: recognized that there should be 1+ at IAU XXVIII GA in Beijing, 2012. Other topics discussed: pulsars, high-redshift galaxies; to be considered for Beijing 2012.

Final program, agreed by consensus:

1. Galileo Franco Pacini (Italy) [Wednesday 5 August 2009]
2. Water on planets
3. Evolution of structure in the Universe
4. Do low-luminosity stars matter?

| Steve Squyres (USA) | [Thursday 6 August 2009] |
| :--- | :--- |
| Simon White (Germany/UK) | [Monday 10 August 2009] |
| Maria Teresa Ruiz (Chile) | [Tuesday 11 August 2009] |

AI-EC84-14 on GS: Invite the four selected ID speakers Paciani, Squyres, White and Ruiz.
Due date: asap. [Done 11-06-2008; Squyres declined; White and Ruiz accepted]

### 8.3. IAU XXVIII General Assembly in Beijing, 2012. NOC report 19-12-2007 (doc)

With satisfaction the EC took note of the document.

### 8.4. IAU XXIX General Assembly, 2015

AI-EC84-15 on GS: Inform all 64 National Members and NCAs of deadlines related to proposals for venue of IAU XXIX GA in 2015. Letters-of-Intent due 1 November 2008. Bid-books due 1 April 2009.
Due date: 1 September 2008.

## 9. INTERNATIONAL YEAR OF ASTRONOMY 2009

9.1. Report by EC-WG IYA2009 secretary (doc, in IB 101, chapter 13)
9.2. UN resolution on IYA2009, dd. 19 December 2007 (doc)
9.4. Prospectus and business plan for the IYA2009 secretariat (late doc)

The EC took with admiration note of the report, resolution and prospectus/plan.

### 9.3. Current issues. Report by EC-WG IYA2009 chair CJC (oral)

The president of the EC-WG on IYA2009, CJC, presented a status report referring also to 9.1 and 9.5. The IYA2009 secretariat has now two payed staff members, Pedro Russo and Mariana Barrosa, with

IAU Press Officer Lars Lindberg Christensen as (in-kind) supervisor. CJC is in daily contact with the IYA2009 secretariat. The IYA2009 secretariat is spending $25 \%$ of its time on fund raising. The IAU Secretariat in Paris handles the financial administration for the IYA2009 secretariat in Garching.

On Astronomy and World Heritage, an initiative of the UNESCO World Heritage Center, the IAU Commission 41 Board (Clive Ruggles) will be asked by VP Brian Warner to create a C41 Working Group on Astronomy and World Heritage from the current membership of C41. Murdin suggested to decouple this activity from IYA2009: too late and too little now, it has long-term relevance which can be initiated in 2009.

On the Opening Ceremony < http://www.astronomy2009.org/special-task-groups-mainmenu-52/opening-event.html >: the French Task Group, chaired by Francoise Combes, is arranging for the Opening Ceremony, to take place on 15 and 16 January 2009 at UNESCO Hq, Paris. UNESCO provides the auditorium, the TG has to pay for the facilities. The DG of UNESCO and the President of the IAU will deliver opening speeches. Among the guests will be students from over the world, 1-3 students per country, to be sponsored by their own country. A webcast will be provided.

On the Closing Ceremony < http://www.astronomy2009.org/special-task-groups-mainmenu-52/closing-ceremony.html >: the Italian Task Group for this event in Italy, January 2010, chaired by Paolo Galluzi (?) and with Bob Williams in the OC, will be asked by CJC for a progress report.

The EC decided to convert the loan to the IYA2009 secretariat of CHF 45,000.- per year for the three years 2007, 2008 and 2009 (together amounting to K€ 81.-) into full sponsoring, upon positive comments from EC members and FSC chair Paul Murdin: "... use the IAU reserves ", "... this will send the right message to the astronomical community ...".

CJC has sent a letter to the PPGF about IYA2009, informing them of potential funding opportunity, just to see if there is interest.

AI-EC84-16 on VP Brian Warner: Communicate with IAU Commission 41 vice-president Clive Ruggles on the formation of a C41 Working Group on Astronomy and World Heritage. Due: asap. [Done]

AI-EC84-17 on GS: As soon as text from Ruggles has been received ([arrived 12 June]), send email message to C41 membership, inviting participation in new C41 WG on Astronomy and World Heritage. This Call for Involvement should be also be put on IAU web. Due: asap. [Done 13 June]

AI-EC84-18 on P-E: Alert Closing Ceremony Task Group chair Paolo Galluzi (?). Due: asap.

AI-EC84-19 on GS: Formalize IAU sponsorship of IYA2009 secretariat with CHF 45,000.- per year for the years 2007, 2008 and 2009 in the IAU accounts. Due: asap. [Done]

AI-EC84-20 on GS: Sign contract with ESO for salary payments 2008 for Pedro Russo and Mariana Barrosa. Due: asap.

AI-EC84-21 on GS: Arrange for having copies of the new IYA2009 brochure sent to all EC members and DPs.
Due: asap. [Done]

### 9.5. $\quad$ IYA2009 accounts (CJC) (late doc)

The EC took note of the report.
9.6. IYA2009 accounts, comments (PGM) (late doc)

With approval the EC took note of the analysis.

## 10. 2009. THE 90 ${ }^{\text {th }}$ ANNIVERSARY OF THE IAU (oral)

The EC decided not to pay particular attention to the $90^{\text {th }}$ anniversary of the IAU at GA2009, but to prepare in due time for the $100^{\text {th }}$ anniversary of the IAU.

The need exists to find an author for a follow-up of Adriaan Blaauw’s book History of the IAU. The Birth and First Half-Century of the International Astronomical Union (Dordrecht: Kluwer, 1994).

## 11. PARTNERSHIP WITH UNESCO-WHC, THEMATIC INITIATIVE "ASTRONOMY AND WORLD HERITAGE"

### 11.1. New draft MoU, dd. 5 December 2007 (doc)

With approval, the EC took note of the MoU. The implementation has a slow start. UNESCO-WHC has high expectations of the IAU, and would like to see a signing ceremony with reception (for the delegates of the UNESCO membership), an exhibition, and a book. Passing on of such requests to IAU Commission 41 vice-president Clive Ruggles had not triggered response as of the end of May 2008. Ruggles has been asked to identify a new IAU Div.XII-C41 Working Group on Astronomy and World Heritage. Progress: see under 9.3.
[In the meantime, Ruggles has also provided a list of astronomical sites of interest for world heritage, which has been forwarded to UNESCO-WHC]

## 12. PARTNERSHIP WITH THE PETER AND PATRICIA GRUBER FOUNDATION

12.1. PPGF Cosmology Prize
12.1.1. PPGF Cosmology Prize 2007. Report (doc, in IB 101, chapter 8)
12.1.2. PPGF Cosmology Prize 2008. Advisory Board 2008, 2009 (doc)
12.1.2.b. Gruber Cosmology prize. Advisory Board (by Ekers) (late-late doc)

The EC took note of documents.
Ron Ekers added that

- the PPGF is taking measures to guarantee continuation of its annual Prizes;
- the PPGF has accepted the idea of awarding teams (which differentiates Gruber Prizes somewhat from Nobel Prizes);
- he is available to serve on the Gruber Cosmology Prize Advisory Board for a second term (2009-2011 Prizes), but he would be willing to resign when his term as IAU EC advisor ends in August 2009.

The President added that the PPGF had asked her whether the Gruber Cosmology Prize 2008 award ceremony could be hosted by the Observatoire de Paris in September 2008, which, however, appeared not feasible. Since then it has been arranged that the 2008 award ceremony will be hosted by Harvard Observatory, Cambridge, MA, USA.
The Gruber Cosmology Prize 2009 award ceremony will take place during the Opening Ceremony of the IAU XXVII GA in Rio de Janeiro, on Tuesday 4 August 2009, to be followed by a presentation of the Gruber Cosmology Prize 2009 winner, on Wednesday 5 August 2009 at lunch time.
It is intended that the Gruber Cosmology Prize 2010 award ceremony will take place in Paris.
The President stated that she is available to succeed James Peebles, when he retires from the PPGF Cosmology Prize Advisory Board at the end of 2009. The GS will inform the PPGF accordingly in late 2008.

AI-EC84-22 on GS: Introduce revised PPGF mission statement on IAU PPGF web page. Due: asap. [done]

AI-EC84-23 on GS: Inform the PPGF that the IAU EC recommends to appoint IAU President Catherine J. Cesarsky as member of the Gruber Cosmology Prize Advisory Board as of January 2010.
Due: October 2008.

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12.2. PPGF Fellowship
12.2.1. PPGF Fellowship 2007 (doc)
12.2.2. PPGF Fellowship 2008 (doc)
12.2.2.r. PPGF Fellowship 2008 (late doc)
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With satisfaction, the EC took note of

- the PPGF Fellowship 2007 for the Polish citizen Dr. Krzysztof Bolejko, being spent in Melbourne, Australia, January - December 2008; and
■ the PPGF Fellowship 2008 for the American citizen Dr. Karen L. Masters, to be spent in Portsmouth, UK, October 2008 - October 2009.


## 13. PARTNERSHIP WITH THE NORWEGIAN ACADEMY OF SCIENCE AND LETTERS ON THE KAVLI PRIZE IN ASTROPHYSICS AND THE IAU ISYAs

### 13.1. Report of visit of IAU GS to NASL SG, Oslo, 3-4 December 2007 (doc)

The EC took note of the report.
13.2. Draft agreement between the Norwegian Academy of Sciences and Letters and the IAU (late doc)

The EC is delighted about these very positive initiatives of Det Norske Videnskaps-Akademi (DNVA): both the offer of involvement of the IAU in the Prize Committee for the Kavli Prize in Astrophysics, starting in 2010, and the offer of sponsorship by the DNVA of the IAU Div.XII/Comm.46/PG-ISYA programme with US\$ 30,000.- per year, starting in 2009.
On 28 May 2008, the Agreement was formally signed at the headquarters of the DNVA in Oslo by the President of the DNVA, Prof. Ole Didrik Larum, and the President of the IAU, Dr. Catherine J. Cesarsky.

AI-EC84-24 on GS: Inform the president of Division XII, Malcolm Smith, the president of Commission 46, Magda Stavinschi, and the chair of PG-ISYA, Jean-Pierre De Greve, of the new partnership with the DNVA, and ask them to involve VP George K. Miley in the planning of the good use of these additional funds. Due: asap. [Done]

## 14. IAU DIVISIONS, COMMISSIONS, WORKING/PROGRAMME GROUPS

### 14.1. Status of the Divisions

In view of the upcoming elections of Division (vice-) presidents and Organizing Committee members, it is important to ask all IAU members to check their IAU Individual Membership profile, and to inform the IAU Secretariat when changes are desired.

Executive Assistant Vivien Reuter informed us of the following Division member statistics (updated 4 June):

| Divisi | Division name | Number of membı |
| :---: | :---: | :---: |
| I | Fundamental Astronomy | 709 |
| II | Sun \& Heliosphere | 889 |
| III | Planetary Systems Sciences | 1042 |


| Divisi | Division name | Number of membı |
| :---: | :---: | :---: |
| IV | Stars | 1200 |
| V | Variable Stars | 812 |
| VI | Interstellar Matter | 915 |
| VII | Galactic System | 646 |
| VII | Galaxies \& the Universe | 1544 |
| IX | Optical \& Infrared Techniques | 371 |
| X | Radio Astronomy | 962 |
| XI Space \& High Energy Astrophys | 897 |  |
| XII | Union-Wide Activities | 885 |

These numbers add up to 10,872 , more than the total number of IAU Indvidual Members, because some 2000 individuals are members of more than one Division.

If Divisions want for the election of their OCs to make use of the IAU data base for the purpose of webvoting, the IAU Secretariat will make such available. If Divisions have already a working procedure, they may wish to stick to that procedure. Divisions with many Commissions have OCs consisting of just presidents and vice-presidents of their Commissions. Exceptions are the two Divisions with one Commission: Division VI (= Commission 34) and Division X (= Commission 40).

Not the Divisions but the Commissions are the scientific backbone of the Union. Commission (and thus Division) membership should be limited to 3 or 4 Commissions.

AI-EC84-25 on GS: Ask the DPs to provide description of how elections have been done in the recent past in each Division. Due: 1 July 2008.

AI-EC84-26 on GS: Inform each DP by 1 September 2008: (a) about the necessity to communicate with his/her OC on the selection of an incoming VP and an incoming OC 2009-2012; and (b) about the deadline of 1 March 2009 for communicating to the GS the names of the incoming VP and OC 2009-2012.
Due: 1 September 2008.
The President suggested that there are too many Divisions and asked the DPs to think how to redistribute the IAU membership. Perhaps Divisions IV and V could merge into one Division on Stars; and perhaps Divisions IX, X and XI chould merge into one Division on Observational Techniques.

Giancarlo Setti commented: "How to divide astronomy without dividing the astronomers"?
AI-EC84-27 on GS: Request all IAU Individual Members (a) to verify and update their membership profiles, (b) to inform the IAU Secretariat of desired changes, (c) to inform the IAU Secretariat of interest to participate in C46 Educational Progamme Groups, and (d) to inform the IAU Secretariat of interest to participate in the Div.XI-WG on Astroparticles. Due: 1 September 2008.

### 14.2. Reports

14.2.1. Div.I/WG Numerical Standards in Fundamental Astronomy (doc)
14.2.2. Div.I/Comm.8/WG Densification of the Optical Reference Frame (doc)
14.2.3. Division III Planetary System Sciences (doc)

The EC took note of the reports
14.2.3.1. Div.III Task Groups to quantify planetary criteria (late-late doc)

Bowell asked the EC whether Resolutions for the GA should be prepared by the new Div.III Task Group on Planetary Orbit Clearing and the new Div.III Task Group on Planetary Hydrostatic Equilibrium. The EC deferred the issue to EC85.
14.2.3.2. Seeking a different term for "dwarf planet" (late-late doc)

The EC recommended not the change the term dwarf planet.

### 14.2.3.3. The naming of putative dwarf planets (late-late doc)

The EC accepted the recommendations made in this document

### 14.2.3.4. Funding the IAU's Minor Planet Center (late-late doc)

The EC took note of this important Call for Proposals from institutions prepared to accept the role of sponsorship of the Minor Planet Center (MPC), under the leadership of NASA's Science Mission Directorate. Proposals should describe how the MPC will retain sponsorship of the IAU, how it will interact with an independent MPC Steering Group, the NEO Program Office, NASA’s Planetary Science Division, and Division III of the IAU. Proposals were due 13 June 2008. Proposals will be reviewed toward the end of 2008 and, if any award is made, funding will be initiated in spring or summer 2009.
Bob Williams: the IAU should continue to sponsor the MPC.
14.2.4. Div.III/Comm. 20 Positions \& Motions of Minor Planets, Comets and Satellites (doc)
14.2.5. Div.III/Comm. 51 Bioastronomy (doc)
14.2.6. Div.VI/Comm.34/WG Astrochemistry (doc)
14.2.7. Div.IX/WG Site Testing Instruments (doc)
14.2.8. Div.X/Comm. 40 Radio Astronomy (doc)
14.2.9. Div.XII/Comm.5/WG Libraries - Open Access (doc)
14.2.10. Div.XII/Comm.5/WG Libraries - Manifesto (doc)
14.2.11. Div.XII/Comm.46/PG International Schools for Young Astronomers (doc)

The EC took note of the reports.
14.2.12. $\quad$ Division member statistics (dd. 4 June 2008) (late-late doc)

The EC took note of the report. See also 14.1.

## 15. STATUS OF IAU SCIENTIFIC MEETINGS

### 15.1. Meetings in 2007. Post Meeting Reports (doc)

The EC took note of the comprehensive report by the AGS and complimented him on the results.
Comments by the GS:
It is of interest to note in the grant distribution statistics that in 2007 certain National Members have been very successful in obtaining grants for participation in IAU scientific meetings, some in excess of the dues paid to the IAU by those IAU National Members in 2007:

| Brasil | factor | 1.5 |
| :--- | :--- | :--- |
| Chile |  | 2.7 |
| Mexico |  | 1.2 |
| Venezuela |  | 2.6 |

In addition: Post Meeting Reports 2006 shows:

| Argentina | factor | 2.8 |
| :--- | :--- | :--- |
| Armenia |  | 1.4 |
| Austria |  | 1.0 |
| Brasil |  | 3.9 |
| Bulgaria |  | 1.0 |
| Cuba | 3.0 |  |
| India | 1.3 |  |
| Iran | 1.0 |  |
| Morocco | 1.0 |  |
| Peru | 2.7 |  |
| Russian Federation | 2.2 |  |
| Serbia \& Montenegro | 2.6 |  |
| South Korea | 1.1 |  |
| Ukraine | 4.4 |  |
| Uruguay | 1.3 |  |
| Venezuela | 2.4 |  |

The AGS announced that updates of servers and style files will be made for submitting proposals for IAU meetings in 2010. He will arrane for a web-based feedback questionary from grantees.

### 15.2. Meetings in 2008

### 15.2.1. IAU Symposia (doc)

The EC took note of the report.

### 15.2.2. Regional IAU Meetings

### 15.2.2.1. $\quad 1^{\text {st }}$ MEARIM, Cairo, Egypt. Report by CJC dd. 16-04-2008 (doc)

CJC and GM reported: in the end this MEARIM was OK, but it was too much a one-man show. The organizers were very helpful. Participants from Iran could not come; Syria and Israel participated. Israel offered remote telescope time. The next MEARIM will be in South Africa, in 2011.

### 15.2.2.2. $\quad 10{ }^{\text {th }}$ APRIM, Kunming, China (doc)

The EC took note of the report. The OC of this Regional IAU meeting did and is doing an impressive job in communicating about the programme. See: < http://aprim.ynao.ac.cn/ >. Present day registration:

| Armenia 1 | China 253 | Kazakhstan 1 | Russia 12 |
| :--- | :--- | :--- | :--- |
| Australia 6 | China / Hongkong 3 | Korea, South 17 | Spain 1 |
| Azerbaijan 3 | China Taipei 13 | Malaysia 4 | Thailand 3 |
| Bangladesh 2 | Germany 3 | Nepal 2 | Turkey 1 |
| Bolivia 1 | Georgia 2 | New Zealand 4 | UK 2 |
| Bulgaria 1 | India 29 | Nicaragua 1 | USA 12 |
| Brasil 1 | Indonesia 26 | Pakistan 1 | Uzbekistan 2 |
| Canada 4 | Iran 3 | Peru 1 | Vietnam 1 |
| Chile 2 | Japan 45 | Philippines 2 |  |

15.3. Meetings in 2009

### 15.3.1. Comments on organization of IAU Symposia (doc)

The EC took note of the report and recommendations by AGS Ian F. Corbett.

### 15.3.2. Selection of non-GA Symposia 2009 (doc)

On behalf of the IAU Division presidents, the Division presidents’ spokesperson Malcolm Smith recommended to the EC:.

Accept the following three non-GA Symposia:
S1 [IAU S260] The role of astronomy in society and culture Paris, France, 23-27 Jan. 2009
S5 [IAU S261] Relativity in fundamental astronomy -- Washington, USA, 27 April - May 2009
dynamics, reference frames, and data analysis
S3 [IAU S268] Light elements in the Universe Geneva, Switzerland, 16-20 Nov. 2009
Co-sponsor the following non-GA meetings:
S7 Dynamic solar corona and its impact on space weather Suzhou, China, 25-29 July 2009
with a contribution of CHF 5000.-
J1 Astronomy and its instruments before and after Galileo Venice, Italy, 28 Sept. - 3 Oct. 2009 with a contribution of CHF 5000.-

The EC accepted the recommendations. The AGS will inform the organizers and ask them to reconfirm by 27 June.

### 15.3.3. Selection of GA2009 Symposia, Joint Discussions and Special Sessions (doc)

On behalf of the IAU Division presidents, the Division presidents’ spokesperson Malcolm Smith recommended to the EC:

Accept the following six GA Symposia:
GA-S1 [IAU S262] Stellar populations: planning for the next decade Div. VIII
GA-S5 [IAU S263] Icy bodies of the solar system Div. III
GA-S10 [IAU S264] Solar and stellar variability -- impact on Earth and planets Div. II
GA-S2 [IAU S265] Chemical abundances in the Universe: connecting first stars to planets Div. IV
GA-S8 [IAU S266] Star clusters -- basic galactic building blocks throughout time and space Div. VII
GA-S14 [IAU S267] Co-evolution of central black holes and galaxies -- feeding and feedback Div. VIII with GA-1, GA-5, GA-10 in the $1^{\text {st }}$ week and GA-2, GA-8, GA-14 in the $2^{\text {nd }}$ week, and keep one in reserve:
GA-S13 Accelerating the rate of astronomical discovery
Div. XII and offer right away SpS status.

Accept the following eight Special Sessions:
SS1 Astronomy in Antarctica (<50 pp, 2.0 d$) \quad$ Div. IX
SS2+9 combined Planetary systems as sites for other life (<150 pp, 2.0 d ) Div. III
SS5+8 combined Integrating teaching -

- the role of history as teaching aid (<100 pp, 2.5 d ) Div. XII
including two hours for discussion on Strategic Plan GM
SS10 Marking the $400^{\text {th }}$ anniversary of Kepler's
"Astronomia Nova" (< 100 pp, 1.50 d) Div. XII
GA-S13 Accelerating the rate of astronomical discovery (<3.0 d) Div. XII
GA-S4 The Galactic plane - in depth and across the spectrum (<3.0 d) Div. VI
GA-S15 IR and sub-mm spectroscopy -
$-a$ new tool for studying stellar evolution ( $<3.0 \mathrm{~d}$ ) Div. IV
GA-S7 Young stars, brown dwarfs, and protoplanetary disks (<3.0 d) Div. VI
and keep two in reserve:
SS7 Next generation large astronomical facilities ( $<200 \mathrm{pp}, 1.5 \mathrm{~d}$ ) Div. IX
SS12 From dark cores to clusters - the last 10 Myr in the MCs ( $<100 \mathrm{pp}, 2 \mathrm{~d}$ ) Div. VIII
Accept the following 16 Joint Discussions (each 1.5 d):

| JD1 | Diffuse light in galaxy clusters (<50 pp) | Div. VIII |
| :---: | :---: | :---: |
| JD2 | Neutron stars - timing in extreme environments (<100 pp) | Div. XI |
| JD3 | Modelling the Milky Way in the era of Gaia (<50 pp) | Div. VII |
| JD4 | Progress in understanding the physics of Ap and related stars (<60 pp) | Div. IV |
| JD6 | Astrophysical outflows and associated accretion phenomena (<100 pp) | Div. VI |
| JD7 | Time and astronomy ( < 120 pp ) | Div. I |
| JD8 | Hot interstellar matter in elliptical galaxies (<100 pp) | Div. VIII |
| JD9 | Dark matter in early-type galaxies ( $<150 \mathrm{pp}$ ) | Div. VIII |
| JD13 | 3 D views on cool stellar atmospheres ( $<60 \mathrm{pp}$ ) | Div. IV |
| JD14 | Are the fundamental constants varying in space-time? (<80 pp) | Div. I |
| JD16 | The first galaxies -- theoretical predictions and observational clues ( $<30 \mathrm{pp}$ ) | Div. VIII |
| JD17 | New advances in helio- and astero-seismology (<60 pp) | Div. II |
| GAS11 | Physics of galaxy clusters from X-ray, microwave and numeric wavelength | Div. XI |
| SS4 | Eta Carinae and other interacting massive binaries ( $<150 \mathrm{pp}$ ) | Div. V |
| SS3 | The ISM in galaxies in the far-IR and sub-mm regions ( $<80 \mathrm{pp}$ ) | Div. VI |
| SS13 | IHY global campaign - whole heliosphere interval (<150 pp) | Div. II |
| and keep one in reserve: |  |  |
| JD5 | Magnetic fields in diffuse media ( $<100 \mathrm{pp}$ ) | Div. VI |

The EC accepted the recommendations. The AGS will inform the organizers and ask them to reconfirm by 27 June.

AI-EC84-28 on AGS: Inform the 2009 IAU meeting organizers of the recommendations of the DPs, as approved by the EC, and request feedback before the end of June 2008. Due: asap. [Done]

Malcolm Smith asked for better pre-submission activity by the Division presidents right after L-o-I phase.
All GA Symposia will have ex-officio SOC members, from the EC:
GAS1, GAS2, GAS8: Beatriz Barbuy
GAS5: Martha Haynes
GAS10: Cheng Fang
GAS14: Ron Ekers
The EC also approved:
Extra Special Session: The International Year of Astronomy 2009 (large auditorium, 1.5d)
Div. XII

On suggestion of DP Ted Bowell, the EC approved the idea that each of the six IAU GA Symposia should start with a 45 minute Review talk open for the entire GA. This would imply that all other parallel sessions at those six occasions will have to deliver up 45 minutes of their programme. The GS will try to fit this in the programme: stagger the start of the six symposia to prevent conflicts. The DPs should take special responsibility for this programme of Reviews, and work with SOCs to identify most suitable topics and best speakers.

| 15.4. | Co-sponsoring of scientific meetings (doc) |
| :--- | :--- |
| 15.4.1. | COSPAR 2008, Montreal, Canada (doc) |
| 15.4.2. | 400 Years of Astronomical Telescopes, Noordwijk, Netherlands (doc) |
| 15.4.3. | Antikythera Conference and Exhibition, Greece (doc) |

Including the two meetings listed above under 5.3.2, the EC agreed to co-sponsor the following meetings:

13-20 July 2008, Montreal, Canada
Contact: COSPAR Secretariat < cospar@cosparhq.cnes.fr >
URL: [http://www.cospar2008.org/](http://www.cospar2008.org/), < http://www.cospar-assembly.org/ >
Co-sponsored by the IAU with CHF 5000.-. Traditionally.
400 Years of Astronomical Telescopes - A Review of History, Science and Technology
29 September - 2 October 2008
ESA-ESTeC, Noordwijk, the Netherlands
Contact: Bernhard Brandl < brandl@strw.leidenuniv.nl >
URL: < http://www.400yearsoftelescopes.org/ >
Co-sponsored by the IAU with CHF 2000.-.

## Antikythera Conference and Exhibition

end of May - early June 2009
Islands of Kythera and Antikythera, and Athens
Contact: Efthymios Nicolaidis < e.nicolaidis@dhstweb.org >
URL:
Co-sponsored by the IAU with CHF 2000.-.
Dynamic solar corona and its impact on space weather
25-29 July 2009
Suzhou, Jiangsu province, China
Contact: Cheng Fang < fangc@nju.edu.cn >
URL:
Co-sponsored by the IAU with CHF 5000.-.

## Astronomy and its Instruments before and after Galileo

28 September - 3 October 2009
Venice, San Servolo Isle, Italia
Contact: Luisa Pigatto [luisa.pigatto@oapd.inaf.it](mailto:luisa.pigatto@oapd.inaf.it)
URL: < http://www1.cadc-ccda.hia-iha.nrc-cnrc.gc.ca/cadcbin/meetings/getMeetings.pl?meeting_no=2394 > Co-sponsored by the IAU with CHF 5000.-.

## 16. STATUS OF IAU PUBLICATIONS

16.1. Highlights of Astronomy (doc)
16.2. Transactions of the IAU (doc)

The EC engaged in a discussion on the usefulness of the Highlights of Astronomy and Transactions A+B. Oddbjorn Engvold: the EC is weak in accumulating knowledge about the IAU and its GAs.
Bob Williams: the publications are worth-while, but not worth the effort.
Giancarlo Setti: ask advice from IAU Commission 41.
Martha Haynes: put more on IAU web and download frequently.
The discussion will be continued at EC85 in April 2009.
AI-EC84-29 on all: Study IAU Highlights of Astronomy and IAU Transactions A+B on IAU web, and report at EC85 in April 2009. Due: 7 April 2009.
16.3. $\quad$ Proceedings of Symposia (doc)

The EC took note of the reports.
16.4. Proceedings of Symposia. Summary 2006-2008 (doc)

The EC took note of the reports. The AGS added that delays are caused by some slow Editors. Preventing and limiting delays requires continuous communication with the Editors. SOCs prepare quit different grant distribution proposals. Bob Williams emphasized that $100 \%$ of the IAU sponsoring (for each Symposium CHF 25,000.-) should be spent on participants’ travel, board, lodging and registration fee. Feed back from beneficiaries should be published on the IAU web.
16.5. IAU Editorial Board (doc)
16.6. Proceedings of Regional IAU Meetings (doc)
16.7. IAU Information Bulletin (doc)
16.8. IAU-related publications (doc)

The EC took note of the reports.

### 16.9. Partnership with CUP <br> 16.9.1. MoA on continuation of contract IAU CUP (doc) <br> 16.9.2. Meeting AGS and GS with CUP dd. 8 May 2008 (late doc)

The EC took note of the reports and approved the MoA on continuation of our partnership with CUP. On photographs in the IAU Symposium proceedings’ volumes: CUP request small numbers of photographs and can accept photographs only if those do not affect the pagination. The EC agreed.

## 17. IAU EDUCATIONAL PROGRAMMES OF DIVISION XII / COMMISSION 46

17.1. PG International Schools for Young Astronomers (PG-ISYA) (doc)
17.2. PG Teaching for Astronomy Development (PG-TAD) (doc, in IB 101, chapter 10.2)
17.3. PG World Wide Development of Astronomy (PG-WWDA) (doc)

The EC took note of the reports.
17.4. Co-sponsoring of COSPAR Capacity Building Workshops (doc)

The EC approved the standing sponsorship by the IAU of one COSPAR Capacity Building Workshop per year, to an amount of CHF 5000.-
17.5. Draft Strategic Plan IAU Educational Programs 2010-2020, by George Miley (doc)

The EC expressed great satisfaction to VP George Miley, supported by Bob Williams and the C46 PG chairs, for the comprehensive document.

Overall comments:

- junior IAU membership not necessary;
- bring in young astronomers to participate in IAU educational activities;
- payed staff needed to coordinate volunteers;
- professional fundraiser necessary to obtain the $10 \mathrm{M} €$ necessary to cover ten years (see Table 4);
- phrase a Resolution for IAU XXVII GA on the vision of this decadal strategic plan, to trigger further discussion at the GA;
- arrange for a 2-hr Special Session during the IAU XXVII GA on this decadal strategic plan.

George's own recollection of the discussion (email dd. 30-5-2008):
""
The draft decadal strategic plan on the world development of astronomy was discussed by the Executive Committee of the IAU at their 84th meeting on 28-30 May 2008.

The EC complemented GM on the plan and thanked the participants at the January brainstorm for their contribution. There was general agreement that the vision and goals of the plan are laudable, that the introduction of the suggested new programmes should be supported. Ways for funding the plan should be investigated.

The EC agreed that GM should produce a final version of the plan for discussion at the General Assembly at Rio according to the timetable outlined in the road map specified below.

During the discussion the following suggestions were made and will be incorporated in the next draft of the SP.

1. The text about initiation of junior membership will be replaced by one stating that the participation of students and postdocs in the programmes will be encouraged.
2. To avoid possible sensitivities, Appendices C and D will be omitted and Section 2 will be re-examined, e.g. by converting Table 2 in 2.3.1 to a pie chart.

GM in consultation with Catherine Cesarsky, Ian Corbett, Ron Ekers and Bob Williams, will draft a general resolution about the strategic plan that will be discussed with Jocelyn Bell, Chair of the Resolutions Committee before finalising. The sentiments to be expressed in such a resolution could be that "The GA (i) approves the strategic plan on the world development of astronomy prepared by the EC, (ii) supports the vision and goals of the plan, (iii) request the EC to implement the plan to the extent allowed by the available resources, and (iv) encourages members to volunteer their help in furthering the activities outlined in the plan.

A 2-hour session will be devoted to a discussion of the plan on the one of the days of the 3-day educational Special Session (amalgamation of GAS 3 and 5).

The road map for producing the plan is as follows:

- June 2008: GM produces second draft of SP and distributes to all stakeholders with request for feedback, including IAU Comms. 46 and 55, contacts at COSPAR, URSI, with request for feedback.
- September 2008: Deadline on feedback from stakeholders to GM
- October 2008: GM produces third draft of SP
- December 2008: EC officially adopts SP (telecon if needed)
- Early 2009: GM and Bob possibly discusses text of document with professional fund raisers in US.
(Consult with Martha and possibly with AUI and AURA regarding establishing tax-free status in US or conduit through other established charitable organisations).
- March - April 2009: SP undergoes final professional editing (GM, Bob and Lars?)
- March 2009. Final version of resolution (Action GM after consultation with CC, IC, RE, RW and Jocelyn Bell).
- April - May 2009: Final document posted on IAU web pages.
- May 2009: SP printed for distribution at GA
- June 2009: GM sends a short contribution on the SP to the editor of the GA newspaper.
- August 2009 GA: 2-hour discussion on SP. Adoption of resolution.
" "

AI-EC84-30 on GM: Produce $2^{\text {nd }}$ draft of his IAU Strategic Plan on World Astronomy Development, for wider distribution. Due: asap. [Done 18-06-2008]

## AI-EC84-31 on GM, IC: Phrase resolution on vision of Strategic Plan and discuss with Resolution Committee (WR §IV.14b). Due: 3 May 2009

## AI-EC84-32 on VP GM and all EC: Carry out roadmap of Miley's Strategic Plan. Due: progressive.

### 17.6. Financing new activities, by Paul Murdin, rev. 2 June 2008 (late-late doc)

Comments by Paul Murdin
Chair FSC 29 May 2008; rev 2 June 2008
The proposed IAU Astronomy Development programme makes a financial demand for an annual administrative cost of 250,000 euros and further annual expenditure of approximately 750,000 euros in smaller and optional items, each of order 2,500 euros to 50,000 euros. The Plan's author, George Miley, suggests that some resources may be provided in kind and some activities are already funded by the IAU,
but this paper addresses the general problem of providing additional such sums of money from the IAU budget.

The programme as presented has vision and appeal and it seemed clear that the EC wanted this programme to happen, so this paper is an attempt to map out the terrain to see how to do so. However, the structure of the proposed programme is difficult in that there is quite a large entry level of annual expenditure that will continue for a long time (indefinitely - at least 5 years). In this it contrasts with the financial structure of the IYA2009 programme which is limited in time scale and which quickly evolves into a programme of financial elements which can approved if and when money becomes available.

In what follows, the financial figures are very rough, so broad brush that I make no distinction between Swiss francs, dollars and euros, and I call them all "units".

There are in principle the following financial opportunities to fund this programme.

## Virement

The budget of the IAU is of order 1 M units per year. If it was decided to change the IAU programme in a very radical way it might be possible to divert $10 \%$ of the budget into the new activity. This would free 100,000 units per year.

## Additional income from national members by increasing the category of membership

The General Secretary's recent approach to national members and his appeal to some of them to increase their category of membership has generated additional income of 150,000 units pa, whose usage is however already spoken for. It seems possible that further appeals may generate further income but the total scope is approximately 70,000 units, of which a fraction might be achieved, say 30,000 pa.

## Income from increasing the unit of contribution

The strategy would be to increase the unit of contribution at a certain small percentage per year above inflation for a number of years, to make the increase easy to swallow. This might produce, say, $2 \%$ per year for say 5 years, i.e. a 10\% per year increase of income, namely 100,000 units per year.

## Publications

The publications income from the publication of proceedings of symposia etc in 2007 was 70,000 pa. It probably has not reached steady state and there could be scope to increase the throughput of books. But doubling this sum might be hard work. The achievable increase is thus 70,000 per year.

## New publications

It is not inconceivable that we could find other things to publish. This might produce a few tens of thousands per year.

## Investment income

The reserves are about 1 million and not very well invested yet (changes in hand). If the reserves were increased and invested better they might produce say 40,000 per year above inflation.

## Use of reserves

It is possible to use reserves for activity that one wishes to participate in. Apart from the issue that the investment income decreases, reserves are finite so they are most useful for single projects or for a finite amount of time. Our present reserves would be exhausted by this programme in only 1 to five years.

## Donors

We have experience of the difficulties in raising money for IYA. In any case, donors tend to give money for single, finite projects or for start up activities. It will be very difficult to raise large sums of money indefinitely from donors. If however we have, as well as a visionary idea, a long term plan to finance the programme sustainably, donors are possible to cover the short term.

I pass into blue skies territory and think outside the box, using George Miley's proposals in his document as a basis for some thoughts:

## Levy on projects

Miley estimates that an $0.7 \%$ levy would produce several millions of euros per year. An obvious difficulty is
that most the money comes from governments with legal restrictions on how the money would be spent.

## Individual members

Miley identifies individual members as a possible source of voluntary contributions for this purpose. Currently individual members pay nothing and we would not want to make membership conditional on being able to pay; nevertheless some can afford a small sum per year and might be willing to give it. We have 10,000 members of whom half are from the ten most active, in general most affluent, astronomical countries. A potential annual fee or donation of 50 units could provide say 250,000 units per year. For this to be effective, IAU would have to set up the appropriate tax favourable structures for at least the largest potential donor countries (in the US perhaps tax exempt status under so-called 501(c) provisions - see http://en.wikipedia.org/wiki/501(c) - in the UK a Registered Charity - see
http://en.wikipedia.org/wiki/Charitable organization; with these countries my personal knowledge ends, and appropriate legal enquiries would have to be made for other likely donor countries).

## New membership categories

If there was a programme of Friends or Supporters, given some privileges and personal attention, they might pay a membership fee. 10,000 such people at 50 units per year would raise 500,000 units. 100 such people at 1000 units would raise 100,000 per year.

## Endorsements

If the IAU was able to satisfy itself about the ethics of its involvement, it might be able to endorse selected high quality publications or products. Such an endorsement might be commercially valuable at the level of a few percent of the market value of the products. The potential is high.

## Summary

|  | Potential | Time scale | Difficulty |
| :--- | :--- | :--- | :--- |
| Virement | 100,000 | Short term | Medium |
| Category of membership | 30,000 | Medium term | Low |
| Unit of contribution | 100,000 | Medium term | low to medium |
| Publications | 70,000 | Medium to <br> long term | low to medium |
| New publications | 20,000 | Long term | high |
| Investment income. | 40,000 | Short term | low to medium |
| Use of reserves | Short term | Immediate but <br> limited | Low |
| Donors | Short term | Unknown, but <br> limited | high |
| Individual members | 250,000 | Medium term | medium? |
| Friends membership category | 100,000 to <br> 500,000 | Long term | Medium to high |
| Endorsements | High | Long term | High |
| Levy | High | Long term | Very high |

Financial plan (potential)

|  | Short term | Medium term | Long term |
| :--- | :--- | :--- | :--- |
| Virement | 100,000 | 100,000 | 100,000 |
| Category of membership |  | 30,000 | 30,000 |
| Unit of contribution |  | 50,000 | 100,000 |
| Publications |  | 70,000 | 70,000 |
| New publications | 40,000 | 40,000 | 20,000 |
| Investment income. | 200,000 | 200,000 | 40,000 |
| Use of reserves | $? ? ? ? ?$ |  | 0 |
| Donors |  | 250,000 |  |
| Individual members |  |  | 250,000 |
| Friends membership |  |  | 100,000 to 500,000 |


| category |  |  |  |
| :--- | :--- | :--- | :--- |
| Endorsements |  |  | High |
| Levy |  |  | High |

## Conclusions

The start-up costs are achievable through the use of reserves and virement, and, with luck, donations. The medium term costs are partly achievable in the medium term, unless we are very lucky with donors. The long term costs are sustainably achievable only through radical measures.

### 17.7 EC oversight of Commission 46 Programme Groups (late-late doc, attached)

The EC approved the proposal made in the document for the PGs on WWDA, TAD, ISYA, and EA to have a combined budget, allocated by the Development Oversight Committee (DOC), a small committee appointed by the EC and chaired by one of its VPs. Proposals for 2009 due: 1 October 2008. Communication of results: 15 November 2008.

## 18. INTERNATIONAL ORGANIZATIONS WITH REPRESENTATIVES FROM THE IAU. REPORTS

18.1. BIPM Consultative Committee for Units (CCU) (doc)
18.2. Federation of Astronomical and Geophysical Services (FAGS) (doc)
18.3. International Earth Rotation and Reference Systems Service (IERS) (doc)
18.4. Committee on Data for Science and Technology (CODATA) (doc)
18.5. Committee on Space Research (COSPAR) (doc)
18.6. COSPAR Capacity Building Workshop, Alexandria, Egypt, 2008 (doc)
18.7. International Council for Science (ICSU) (doc)
18.8. Inter-Union Commission on Frequency Allocation for Radio Astronomy and Space Research (IUCAF) (doc)
18.9. International Union of Pure and Applied Physics (IUPAP) (doc)
18.10. International VLBI Services for Astronomy and Geodesy (IVS) (doc)
18.11. Scientific Committee on Problems of Environment (SCOPE) (doc)
18.12. Scientific Committee on Solar-Terrestrial Physics (SCOSTEP) (doc)

The EC took note of the reports.
Ron Ekers suggested to reconsider IAU financial support to IUCAF. The GS needs not only activity reports but also a financial reports to judge proper use of IAU funds.

## 19. NEXT EXECUTIVE COMMITTEE MEETING: EC85, APRIL 2009, PARIS

Originally it was planned to have the regular IAU Officers’ Meeting in Paris at the end of January 2009, with the usual reception at the Observatoire de Paris for friends of the IAU in Paris.

However, in order to give the EC members more opportunity to participate in the various GA2009 sessions, and in view of the important January 2009 agenda items of the IYA2009 Opening Ceremony (Paris, 15-16 January 2009) and IAU Symposium No. 260 on The role of astronomy in society and culture (Paris, 23-27 Jan. 2009 ), it was decided to have a one-day Officers’ Meeting on 6 April 2009, followed by a two-day EC meeting: EC85 in Paris, 7-8 April 2009.

## 20. EC86 AND EC87, AUGUST 2009, RIO DE JANEIRO, BRAZIL

EC86 in Rio de Janeiro will start on Sunday 2 August 2009 and will be joined by the outgoing Division presidents.

EC87 in Rio de Janeiro will start on Friday 14 August 2009 and will be joined by the incoming Division presidents.

### 20.1. Suggestions for agendas (oral)

As yet no suggestions made.

## 21. EC88 IN MAY 2010

### 21.1. Host \& venue: Bob Williams, Baltimore, MD, USA (oral)

The EC gratefully accepted.

## 22. ANY OTHER BUSINESS

Williams on MPC: the IAU should continue to sponsor the MPC. See also: 14.2.3.3.
Setti on GSs: the IAU should create an IAU web page with a picture gallery of past IAU General Secretaries.

The GS thanked the IAU Executive Assistant, Mme Vivien A. Reuter, for her devotion and perseverance demonstrated during her first three months on the job, and handed to her a contrat de travail a durée indeterminée.

## 23. LIST OF ACTIONS ITEMS

AI-EC84-1 on P and PO: Phrase press release on category name plutoid and on naming requirements. Due: asap. [Done. Press release 11 June 2008.]

AI-EC84-2 on GS: Inform Division Presidents on procedure of selection of SNC members (Bye-Laws §III.910) . Due: asap.

AI-EC84-3on GS: Arrange with EC-WG-NEO chair David Morrison an extension of the terms of reference of the IAU EC-WG to Hazards of all Solar System Planets.
Due: asap.
AI-EC84-4 on GS ( = AI-OM08-2): Inform IAU Press Officer Lars Lindberg Christensen again that the text on the IAU web pages of each of the popular astronomy Themes must be approved by the president of the IAU Division and/or IAU Commission related to that Theme.

## Due: asap.

AI-EC84-5on GS and EA: Check on European legislation with respect to privacy issues related to web sites.
Due: asap.
AI-EC84-6 on P-E: Mail revised versions of the Statutes, Bye-Laws and Working Rules to GS.
Due: asap. [done].

AI-EC84-7 on GS: Publish revised Working Rules, as approved by the EC, on the IAU web.
Due: asap. [done].
AI-EC84-8 on GS: Submit a specific proposal of revisions of Statutes and Bye-Laws, as approved by the EC, to the National Members (Statutes VII.16, Bye-Laws II.7a), to be considered by the General Assembly. Due: 3 February 2009.

AI-EC84-9 on GS: Inform the CAAA that the IAU EC has decided to abolish collective National Membership; that the CAAA qualifies for reimbursement of the back-payment of CHF 7572.-; and that the CAAA member states are encouraged to apply individually for IAU National Membership.
Due date: asap.

AI-EC84-10 on GS: Prepare an IAU web page on National Membership application, including the approved text. Due date: asap.

AI-EC84-11 on GS: Inform the contact persons in Korea DPR , Nepal, Singapore, Bangladesh, Kazakhstan, Vietnam, Costa Rica, El Salvador, Honduras, Guatemala, Nicaragua, and Panama on the procedure and requirements for applying for IAU National Membership by mail, referring to the IAU web page on National Membership.
Due date: asap.
AI-EC84-12 on P: Write « welcome to IAU XXVII GA» letter for IB 102.
Due: asap. [Done 14-06-2008]

AI-EC84-13 on Daniela Lazzaro: Write «Health and Security chapter » for IAU XXVII GA web site. Due: asap.

AI-EC84-14 on GS: Invite the four selected ID speakers Paciani, Squyres, White and Ruiz.
Due date: asap. [Done 11-06-2008; Squyres declined; White and Ruiz accepted]

AI-EC84-15 on GS: Inform all 64 National Members and NCAs of deadlines related to proposals for venue of IAU XXIX GA in 2015. Letters-of-Intent due 1 November 2008. Bid-books due 1 April 2009.
Due date: 1 September 2008.

AI-EC84-16 on VP Brian Warner: Communicate with IAU Commission 41 vice-president Clive Ruggles on the formation of a C41 Working Group on Astronomy and World Heritage. Due: asap. [Done]

AI-EC84-17 on GS: As soon as text from Ruggles has been received ([arrived 12 June]), send email message to C41 membership, inviting participation in new C41 WG on Astronomy and World Heritage. This Call for Involvement should be also be put on IAU web. Due: asap. [Done 13 June]

AI-EC84-18 on P-E: Alert Closing Ceremony Task Group chair Paolo Galluzi (?). Due: asap.
AI-EC84-19 on GS: Formalize IAU sponsorship of IYA2009 secretariat with CHF 45,000.- per year for the years 2007, 2008 and 2009 in the IAU accounts. Due: asap. [Done]

AI-EC84-20 on GS: Sign contract with ESO for salary payments 2008 for Pedro Russo and Mariana Barrosa. Due: asap.

AI-EC84-21 on GS: Arrange for having copies of the new IYA2009 brochure sent to all EC members and DPs.
Due: asap. [Done]

AI-EC84-22 on GS: Introduce revised PPGF mission statement on IAU PPGF web page.
Due: asap. [done]

AI-EC84-23 on GS: Inform the PPGF that the IAU EC recommends to appoint IAU President Catherine J. Cesarsky as member of the Gruber Cosmology Prize Advisory Board as of January 2010.
Due: October 2008.
AI-EC84-24 on GS: Inform the president of Division XII, Malcolm Smith, the president of Commission 46, Magda Stavinschi, and the chair of PG-ISYA, Jean-Pierre De Greve, of the new partnership with the DNVA, and ask them to involve VP George K. Miley in the planning of the good use of these additional funds.
Due: asap. [Done]
AI-EC84-25 on GS: Ask the DPs to provide description of how elections have been done in the recent past in each Division.

## Due: 1 July 2008.

AI-EC84-26 on GS: Inform each DP by 1 September 2008: (a) about the necessity to communicate with his/her OC on the selection of an incoming VP and an incoming OC 2009-2012; and (b) about the deadline of 1 March 2009 for communicating to the GS the names of the incoming VP and OC 2009-2012.
Due: 1 September 2008.
AI-EC84-27 on GS: Request all IAU Individual Members (a) to verify and update their membership profiles, (b) to inform the IAU Secretariat of desired changes, (c) to inform the IAU Secretariat of interest to participate in C46 Educational Progamme Groups, and (d) to inform the IAU Secretariat of interest to participate in the Div.XI-WG on Astroparticles.
Due: 1 September 2008.
AI-EC84-28 on AGS : Inform the 2009 IAU meeting organizers of the recommendations of the DPs, as approved by the EC, and request feedback before the end of June 2008.
Due: asap. [Done]
AI-EC84-29 on all: Study IAU Highlights of Astronomy and IAU Transactions A+B on IAU web, and report at EC85 in April 2009.
Due: 7 April 2009.
AI-EC84-30 on GM: Produce $2^{\text {nd }}$ draft of his IAU Strategic Plan on World Astronomy Development, for wider distribution.
Due: asap. [Done 18-06-2008]
AI-EC84-31 on GM, IC: Phrase resolution on vision of Strategic Plan and discuss with Resolution Committee (WR § IV.14b).
Due: 3 May 2009
AI-EC84-32 on VP GM and all EC: Carry out roadmap of Miley's Strategic Plan. Due: progressive.

## 24. CLOSURE OF EC84

KAvdH, 25 June 2008,
with thanks to MH, GM, and VR for providing their notes.

