

# INTERNATIONAL ASTRONOMICAL UNION

## Executive Committee

### 73rd Meeting

Council Chamber, Whitworth Hall, University of Manchester

August 7, 2000 09:00 - 17:30

August 8, 2000 09:00 - 12:30

August 9, 2000 09:00 - 12:30

August 15, 2000 16:00 - 17:30

## MINUTES

### Present:

R. Kraft	President
F. Pacini	President-Elect
J. Andersen	General Secretary
H. Rickman	Assistant General Secretary
C. Cesarsky	Vice-President
B. Hidayat	Vice-President
N. Kaifu	Vice-President
N. Kardashev	Vice-President
V. Trimble	Vice-President
L. Woltjer	Adviser
I. Appenzeller	Adviser

### Invited:

O. Engvold	Incoming Assistant General Secretary
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### With the participation of Division Presidents:

K. Seidelmann	Division I
P. Foukal	Division II
M. A'Hearn	Division III
B. Barbuy (for L. Cram)	Division IV
E. Guinan (for M. Jerzykiewicz)	Division V
M. Dopita	Division VI
K. Freeman	Division VII
P. Shaver	Division VIII
C. Sterken	Division IX
J. Moran	Division X

### In attendance:

M. Léger-Orine	Executive Assistant
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## OPENING BY THE PRESIDENT

The President, R. Kraft, welcomes the members of the Executive Committee to the 73rd meeting, in the prestigious Council Chamber of the Whitworth Hall of The University of Manchester, and also the Presidents of Divisions. He also calls for one minute of silence in tribute to Vice-President Claudio Anguita, who passed away March 2<sup>nd</sup>, 2000.

## APPROVAL OF AGENDA

The agenda is adopted, with two new items and some minor re-arrangements:

- The Peter Gruber Foundation Prize and Fellowship
- WGPSN: Approval of provisional names for lunar topographic features

## EC INTERNAL MATTERS

The minutes of EC 72, previously circulated by e-mail, are approved, A summary of decisions since EC 72 is attached. The draft EC report for 1997-2000 is approved for publication in Transactions XXIVB, with updates as necessary.

## IAU SECRETARIAT

The GS reports that the Secretariat continues to function well due to the efforts of Monique Léger-Orine and Jodi Greenberg, despite rising stress levels due to the heavy workload before the GA.

## IAU ARCHIVES 1919-1970

The General Secretary informs that A. Blaauw has finished his work which has been published as a booklet to be distributed to libraries. A procedure has been set up regarding the dispatching of this booklet, which will be done by the Kapteyn Institute at self cost.

## REPORT OF THE SPECIAL NOMINATING COMMITTEE

The President reports that the SNC will propose to the vote of the General Assembly the following Executive Committee for the period 2000-2003:

F. Pacini	President	Italy
R.D. Ekers	President-Elect	Australia
H. Rickman	General Secretary	Sweden
O. Engvold	Assistant General Secretary	Norway
C. Cesarsky	Vice-President	France
N. Kaifu	Vice-President	Japan
N. Kardashev	Vice-President	Russia
K.A. Pounds	Vice-President	UK
S. Torres-Peimbert	Vice-President	Mexico
R.E. Williams	Vice-President	USA
R. Kraft	Adviser	USA
J. Andersen	Adviser	Denmark

## NATIONAL MEMBERSHIP

The Royal Astronomical Society is the new Adhering Organization for the *United Kingdom*, effective 1.1.2001.

*Jordan, Morocco, The Philippines, and Cuba* have applied for membership in the Union as Associate Members. The EC will propose to the GA to accept these applications. No addresses at the GA from the applying countries are planned, as some of them are not represented at the GA.

## INDIVIDUAL MEMBERSHIP

All names presented by Division and EC Working Group Presidents under List B are supported by the Executive Committee and will be submitted to the Nominating Committee. Altogether, 703 individuals are proposed as new Members, and all are admitted by the EC in the final session of EC 73.

## THE PETER GRUBER FOUNDATION (PGF) PRIZE

After thorough discussions, the EC decides to enter into a collaboration with the Peter Gruber Foundation (PGF) concerning its Cosmology Prize. This prize is awarded annually to scientists of any nationality working in the fields of astronomy, physics, mathematics and philosophy of science for scientific advances in our understanding of the Universe. Starting in 2001, the Prize recipients are selected by an International Advisory Board of seven members, nominated by the IAU and other scientific unions. The Prize consists of a medal and a cash sum of 150,000 USD ; in GA years, it will be awarded at the GA

J. Andersen will work further with the PGF to formalize the agreement.

L. Woltjer and V. Radhakrishnan are nominated by the EC for new membership in the International Advisory Board, and V. Rubin nominated for an additional term.

Discussion of the associated fellowship program is postponed until EC 74.

## PLANNING FOR GA XXIV

### Nominations for official Interpreters:

N. Cramer	English-French
E. Griffin	French-English

### Nominations for Tellers

C.D. Scarfe  
P. Whitelock

### Nomination of a Standing Finance Sub-Committee 2000-2003

T. Fukushima (Chair)	Japan
D. McNally	UK
R. Milkey	USA
D. Morton	Canada
T. Viik	Estonia

### Nomination of a Standing Resolutions Committee 2000-2003

I. Appenzeller	Germany
C. Corbally	Vatican City State
J. Kovalevsky (Chair)	France
V. Trimble	USA
R. West	Germany

### Special Nominating Committee 2000-2003

S. Collin	France
M. Dopita	Australia
S. Ferraz-Mello	Brazil
R.P. Kraft	USA
M. Mayor	Switzerland

F. Pacini (Chair)  
M.-T. Ruiz

Italy  
Chile

## Resolutions

The EC reviews the resolutions to be submitted to the vote of the General Assembly. Among these resolutions, the EC decides to not recommend GA approval of resolution B3 "Safeguarding the information in photographic plates" which will be submitted to the vote of the General Assembly. The EC objects to an IAU recommendation to "transfer" them to digital form for three reasons, two of which are scientific: (i) not all information is preserved in the digitisation, so a digital copy is not a substitute for the original; and (ii) no digital medium is yet known to be a safer long-term depository of the information than the photographic plates themselves. The third, and main objection, is on matters of principle: "Importance" or "priority" are not absolute but relative quantities, and recommending one specific project is necessarily at the expense of something else which has not been discussed.

## Voting rights of Adhering Organizations

Following article 15 a of the Statutes, on questions concerning the administration of the Union, not involving its budget, voting at the General Assembly is by Adhering Country, each country having one vote. Adhering Countries which have not paid their annual contributions up to 31 December of the year preceding the General Assembly may not participate in the voting. Out of 66 member countries, 58 are represented, and due to default in payment of the dues (CAAA, Indonesia, Latvia, Turkey, Ukraine, and Uzbekistan), 54 of these countries are allowed to take part in the votes, with 54 votes. In agreement with the meeting of National Representatives, Associate Members will take part in the votes on non-financial matters.

Following article 15 b of the Statutes, on questions involving the budget of the Union, voting is similarly by Adhering Country, under the same conditions and with the same reservations as in article 15(a), the number of votes for each Adhering Country being one greater than the number of its category. Out 55 full member countries, 50 countries are represented, and due to default in the payment of the dues (Indonesia, Latvia, Turkey, and Ukraine), 46 countries are allowed to take part in the votes, with 169 votes.

## Financial status; travel grants

A total of 508,000 CHF have been distributed in grants to 410 scientists attending the General Assembly. The sources for these funds are:

IAU budget (GA, Symposia, etc.)	367200 CHF
ESO	74000 CHF
UK Local Organizing Committee	50800 CHF
EŠA	16000 CHF

## Revision of Statutes and Bye-Laws

The new version of the Statutes and Bye-Laws as approved at EC 72 will be submitted to the vote of the General Assembly during its first session.

For the future, it is recommended that the Statutes, Bye-Laws and Working Rules be entirely rewritten in order to correct inconsistencies which have been caused by successive iterations. Practical modalities are left to EC 74. This intention will be brought to the attention of the National Representatives and of the Adhering Organizations.

## DIVISION AND COMMISSION STRUCTURE

Several questions concerning the structure of Divisions and Commissions were discussed with input in part from the meeting between IAU Officers and Commission Presidents, and it was concluded that the incoming EC should work toward an update of this structure. In particular, for one-Commission Divisions it was decided, effective immediately, that the same person should always be President of both entities.

## MATTERS CONCERNING DIVISIONS

### WG structure in Division III

New Terms of Reference for the WG on Planetary System Nomenclature (WG PSN) and the Committee for Small Bodies Nomenclature have been approved (Feb. 15, 2000, enclosed). WG PSN, previously under the Executive Committee, becomes a Working Group of Division III

A list of new and revised Solar System nomenclature items has been approved (Dec. 15, 1999, enclosed)

### Proposals to GA for new Presidents of Divisions as endorsed by the EC:

I	Fundamental Astronomy	N. Capitaine	France
II	Sun & Heliosphere	A. Benz	Switzerland
III	Planetary Systems Sciences	M.Ya. Marov	Russia
IV	Stars	B. Barbay	Brazil
V	Variable Stars	E.F. Guinan	USA
VI	Interstellar Matter	B. Reipurth	USA
VII	Galactic System	G. Meylan	Germany
VIII	Galaxies & The Universe	V. Trimble	USA
IX	Optical & Infrared Techniques	A.U. Landolt	USA
X	Radio Astronomy	L. Padrielli	Italy
XI	Space & High Energy Astrophysics	G. Srinivasan	India

## MATTERS CONCERNING COMMISSIONS AND WORKING GROUPS

### Merger of Commissions 8 & 24

The merging having been carefully prepared by Commission 8 & 24, no difficulty is foreseen. The two Commissions will be merged as Commission 8: "*Astrometry*".

### Merger of Commissions 46 and 38

With the help of D. Wentzel, Terms of Reference for Commission 46, widely circulated between the groups concerned, have received the approval of commissions and bodies involved. The new Commission 46, combining the former Commission 38 and 46 and the EC WG on the World Wide Development of Astronomy, is expected to organize all educational activities. The main features are the creation of Program Groups and the increase of the resources, reflected in the budget for the triennium 2001-2003, which amounts to CHF 100,000 in 2001 & 2002 and to CHF 70,000 in 2003.

### Minor Planet Center (MPC)

Terms of Reference for the IAU MPC have been negotiated by the GS and circulated to and approved by Commission 20. They are discussed and preliminarily endorsed by the EC. Final approval is left to the decision of the new Executive Committee at the 74<sup>th</sup> meeting.

## WG on Controlling Light Pollution

This WG, under Commission 50, chaired by Dr. M. Smith, AURA Observatories, Chile, has been approved (Feb. 15, 2000) and is already very active.

## Reports/reappointment/termination of EC Working Groups

WG WWDA: The restructured Commission 46 will take over the activities of the WG, which is therefore terminated.

WG PSN has been moved to Division III.

WG FLSF: R. Schilizzi is appointed new Chairman of this WG.

WG AA: The Chairman of the WG, M. Dopita, proposes to terminate the WG on Antarctic Astronomy as its task has been completed. This is accepted. Contact will be maintained through the permanent IAU representative in SCAR, John Storey.

## Proposals to GA for new Presidents and Vice-Presidents of Commissions

President, Country / Vice-President, Country

### *Commissions & Working Group of the Executive Committee*

5	Documentation & Astronomical Data	O.B. Dluzhnevskaya, Russia / F. Genova, France
6	Astronomical Telegrams	B.G. Marsden, USA / K. Aksnes, Norway
46	Astronomy Education and Development	S. Isobe, Japan / J.M. Pasachoff, USA
50	Protection of Existing & Potential Observatory Sites	R.J. Cohen, UK / M.G. Smith, Chile
WG	Future Large Scale Facilities	R. Schilizzi, Netherlands

### *Division I - Fundamental Astronomy*

4	Ephemerides	J. Chapront, France / G.A. Krasinsky, Russia
7	Celestial Mechanics & Dynamical Astronomy	J.D. Hadjidemetriou, Greece / A. Milani, Italy
8	Astrometry	W.-J. Jin, China PR / I.K. Platais, USA
19	Rotation of the Earth	N. Capitaine, France / V. Dehant, Belgium
31	Time	G. Petit, France / D.N. Matsakis, USA

### *Division II - Sun & Heliosphere*

10	Solar Activity	A.O. Benz, Switzerland / D.B. Melrose, Australia
12	Solar Radiation & Structure	S.K. Solanki, Germany / T. Bogdan, USA
49	Interplanetary Plasma & Heliosphere	M. Vandas, Czech R / D.F. Webb, USA

***Division III - Planetary Systems Sciences***

- 15 Physical Study of Comets & Minor Planets H.U. Keller, Germany / E.F. Tedesco, USA  
16 Physical Study of Planets & Satellites D.P. Cruikshank, USA / R. Courtin, France  
20 Positions & Motions of Minor Planets,  
Comets & Satellites E.L.G. Bowell, USA / G.B. Valsecchi, Italy  
21 Light of the Night Sky P. Lamy, France / J.M. Greenberg, Netherlands  
22 Meteors, Meteorites & Interplanetary Dust V. Porubcan, Slovak R / I. Mann, Germany  
51 Bioastronomy: Search for Extraterrestrial Life C.S. Bowyer, USA / K. Meech, USA

***Division IV - Stars***

- 26 Double & Multiple Stars C.D. Scarfe, Canada / W.I. Hartkopf, USA  
29 Stellar Spectra G. Mathys, Chile / C.A. Sneden, USA  
35 Stellar Constitution D. Vandenberg, Canada / W. Dziembowski, Poland  
36 Theory of Stellar Atmospheres D. Dravins, Sweden / M., Spite France  
45 Stellar Classification T.H. Lloyd Evans, South Africa / C. Corbally, Vatican City State

***Division V - Variable Stars***

- 27 Variable Stars J. Christensen-Dalsgaard, Denmark / C. Aerts, Belgium  
42 Close Binary Stars P. Szkody, USA / A. Gimenez, Spain

***Division VI - Interstellar Matter***

- 34 Interstellar Matter B. Reipurth, USA / J.E. Dyson, UK

***Division VII - Galactic System***

- 33 Structure & Dynamics of the Galactic System D.N. Spergel, USA / P.A. Whitelock, S. Africa  
37 Star Clusters & Associations G. Meylan, Germany / A. Sarajedini, USA

***Division VIII - Galaxies & The Universe***

- 28 Galaxies S. Okamura, Japan / E. Sadler, Australia  
47 Cosmology J.A. Peacock, UK / S. Lilly, Canada

***Division IX - Optical & Infrared Techniques***

- 9 Instrumentation & Techniques D.-Q. Su, China PR / M. Dennefeld, France  
25 Stellar Photometry & Polarimetry C.L. Sterken, Belgium / A.U. Landolt, USA  
30 Radial Velocities A.A. Tokovinin, Russia / B. Nordström, Denmark

***Division X - Radio Astronomy***

- 40 Radio Astronomy L. Padrielli, Italy / L. Rodriguez, Mexico

***Division XI - Space & High Energy Astrophysics***

- 44 Space and High Energy Astrophysics G. Srinivasan, India / H. Okuda, Japan

### *Commissions not Attached to a Division*

14 Atomic & Molecular Data

P.L. Smith, USA / S. Johansson, Sweden

41 History of Astronomy

F.R. Stephenson, UK / A.A. Gurshtein, Russia

### **FINANCIAL MATTERS**

#### **Status of payment of dues**

An extra effort has been made to remind Member Countries to pay their dues before the General Assembly, and the result has been very gratifying: Arrears are at their lowest level since many years.

The fees of Algeria have been waived by the EC for 1995-1998. The fee for 1999 has been paid normally.

The EC agrees to waive the fees of Lithuania for 1995-1997. The fee for 1998 has been paid normally.

#### **Report of the Finance Subcommittee (See document enclosed)**

##### *Audited Accounts 1999*

The excess income of about CHF 100,000 above the budget is mainly due to the fact that Adhering Organizations have caught up on payments, as is usually the case the year preceding the General Assembly.

##### *Audited Accounts 1997-1999*

The Finance Subcommittee, in its report, "congratulates the General Secretary in responding to its Kyoto recommendations to bring expenditures in line with income over the 3 years". The Subcommittee recommends also that the budget corresponding to the Executive Committee expenses be increased for the future and compensated by changes elsewhere.

##### *Budget status 2000 and Draft Budget 2001-2003 (See document enclosed)*

The provisional accounts as of July 31, 2000 are in line with the budget.

The Finance Subcommittee states that "the proposed 2001-2003 budget has been prepared in accord with the guidance given by the Finance Committee in Kyoto and is ready for consideration by the Finance Committee in Manchester".

### **PLANNING FOR THE XXVTH GENERAL ASSEMBLY, 2003**

Representatives from Australia are present at the General Assembly in order to promote the XXVth GA in Sydney. A presentation by D. Malin is scheduled during the 2<sup>nd</sup> session of the GA.

### **THE XXVITH AND XXVIITH GENERAL ASSEMBLIES, 2006 AND 2009**

#### **XXVIth General Assembly, 2006**

After very extended deliberations and consultation with representatives from Canada and the Czech Republic, a vote among the EC members gives a clear preference for Prague. This choice will be brought to the vote of the GA during its 2<sup>nd</sup> session.

#### **Letters of Intent for the XXVIIth General Assembly, 2009**

Two letters of intent have been received, from the Chinese Astronomical Society to hold the XXVIIth GA in Shanghai, and from the Brazilian Committee for Astronomy, to hold the GA in Brazil. The GS will thank these two bodies and invite other Adhering Organizations to submit proposals by 2001.

## STATUS OF APPROVED SCIENTIFIC MEETINGS

### Symposia

Symposia 195 through 200 have been held. No special remark is made.

### Colloquia

Colloquia 174 through 182 have been held. No special remark is made.

### Co-sponsored meetings

Three co-sponsored meetings have been held: IMPACT Workshop, Special Educational Workshop in connection with UNISPACE III and the 33<sup>rd</sup> COSPAR Scientific Assembly. No special remark is made.

### Remarks

The scientific reports attached to the documents are found to be valuable and worthy of further dissemination. It is suggested that they may be included into the Web page for IAU Meetings, and that, specifically, emphasis could be placed on lessons to be learned for future meetings.

Another general remark made by the AGS is that there has been a significant drop in the number of proposals for Colloquia and that this is beginning to show up in the number of meetings held. The EC suggests that closer contacts with the DPs may help to overcome this problem.

## EDUCATIONAL MATTERS

### ISYAs - Review of 8 previous ISYAs

A document has been prepared by D. Wentzel, which shows the positive long-term impact of the ISYAs. D. Wentzel points out that the term "School" used in the title "International School for Young Astronomers" is misleading and potentially counterproductive for the ISYAs.

### TAD in 2000 and onwards

Reports have been received concerning TADs in Morocco and Vietnam. These two programmes will be carried on in 2001 and further. Unfortunately no report has been received from TAD in Central America, despite repeated requests by D. Wentzel. Most of the funds having been committed, any decision concerning this last programme will be subject to the availability of additional funds. A total estimated budget of USD 30,000 is presented for the period 2001-2003.

### Joint Initiatives with COSPAR and UN

A joint IAU-COSPAR-UN *Special Educational Workshop* was held during the UNISPACE III Conference in Vienna in July 1999 and was well attended and well received. Its recommendations were presented to the main Conference and generally strongly supported in the *Report and Recommendations* of UNISPACE III, which has later been endorsed by the UN General Assembly. Synergistic initiatives between the IAU, COSPAR, and the *Regional Educational Centres for Space Science and Technology*, affiliated to the United Nations, were among these recommendations and are currently being actively explored.

### Joint Initiatives with UN and ESA

The IAU was represented by S. Frandsen, Denmark, at the Ninth UN/ESA Workshop *on Basic Space Science*, held in Toulouse, France, June 27-30, 2000.

## RELATIONS TO OTHER ORGANIZATIONS

### ICSU

The IAU was represented by the General Secretary at the 26th General Assembly, Cairo, Egypt, September 20-30, 1999.

The IAU was represented by J. Fierro (President, Commission 46) at the Conference on the Programme for Capacity Building in Science, June 24-25, 1999, organised in conjunction with the ICSU/UNESCO World Conference on Science in Budapest, Hungary, in June, 1999.

### COSPAR

The IAU was represented by the General Secretary at the 61<sup>st</sup> Bureau meeting, July 15 & 22, 2000, Warsaw, Poland and at the 33rd Scientific Assembly and Council Meeting, Warsaw, Poland, July 16-23, 2000.

### UN-COPUOS

The IAU was represented by the General Secretary at the meetings of the full UN Committee on the Peaceful Uses of Outer Space (COPUOS) on July 18, 1999. Presentations were made at this meeting on the environmental challenges to astronomy and on International Coordination of Research on Near-Earth Objects.

The IAU was represented by the General Secretary at the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) in Vienna, July 19-30, 1999.

Two events under the Technical Forum accompanying the Conference were organised by the IAU jointly with COSPAR and the UN Office of Outer Space Affairs: Symposium 196 on Preserving the Astronomical Sky (July 12-16), and a Special Educational Workshop: Capacity Building in Astronomy and Basic Space Science (July 20-22).. The recommendations of these meetings are included in the Report of UNISPACE III (UN doc. A/Conf.184/6) and, to a considerable degree, in the recommendations of the Conference. With the subsequent endorsement of these recommendations by the UN General Assembly in December 1999, these now form part of the official UN policy for the development of space activities in the first decades of the new millennium.

The IAU is presently working with interested Member States, space agencies, and other relevant international and national Unions, scientific committees, and research organizations to develop specific proposals for international environmental standards for future space experiments, to be eventually submitted to UN-COPUOS.

The new Director of the UN Office for Outer Space Affairs is Dr. Mazlan Othman, a very active IAU member and participant in the Educational Workshop.

### IERS

J. Vondrak has been appointed as new IAU Representative to IERS (Dec. 15, 1999)

## PUBLICATIONS

### Donations by Sky & Telescope

About 30 free subscriptions have been offered by Sky and Telescope to institutes in developing countries. J. Percy, D. Wentzel and the GS have prepared the list of the beneficiaries.

### **Highlights of Astronomy**

This publication, in its present form, seems not to be satisfactory as some organizers of Joint Discussions would like to publish more extensive reports of their meetings. A solution might be to create a new series of IAU publications, which could be published quickly, at low cost and carry proceedings of both the Colloquia and some Joint Discussions. This item will be discussed during EC 74.

### **OTHER BUSINESS**

The President thanks the EC members for their participation in the meeting, and in particular the vice-presidents who are finishing their term for their valuable advice during this 6 year-period. He also thanks the General Secretary for his tremendous work during his term.