## INFORMATION BULLETIN 76

January 1996

## CONTENTS

```
i Editorial
ii In Memoriam
1. GENERAL ASSEMBLIES
1.1 The XXIIIrd General Assembly, Kyoto, Japan
1.2 General Deadlines for the XXIIIrd General Assembly
1.3 Additional Deadlines for Adhering Organisations,
    Commissions and Divisions
2. EXECUTIVE COMMITTEE
2.1. 67th Meeting of the IAU EC
2.2. 68th Meeting of the IAU EC
3. DIVISIONS: World Wide Web
4. COMMISSIONS AND WORKING GROUPS
4.1. New EC Working Group
4.2. Working Group for the Worldwide Development
    of Astronomy
5. SCIENTIFIC & EDUCATIONAL ACTIVITIES
5.1. Commission 38: Exchange of Astronomers
    IAU Travel Grants: Guidelines
5.2. Commission 46: Teaching of Astronomy
5.2.1. 22nd International School for Young Astronomers
5.2.2. Teaching for Astronomy Development (TAD)
5.3. Future IAU Scientific Meetings
5.3.1. Deadline
5.3.2. Future IAU Symposia
5.3.3. Future IAU Colloquia
5.3.4. Future Regional Astronomy Meetings
5.3.5. Future Technical Meeting
5.3.6. Future co-Sponsored Meetings
6. OTHER SCIENTIFIC MEETINGS OF INTEREST
    TO IAU MEMBERS
```

```
7. INTERNATIONAL ORGANISATIONS: ICSU/UNESCO
        Meeting on Electronic Publishing
8. IAU PUBLICATIONS
8.1. Highlights of Astronomy
8.2. Transaction XXII B
8.3. Membership List
8.1. Symposia
8.2. Colloquia
9. MEMBERSHIP: WWW
10. OTHER MATTERS:
    International Earth Rotation Service (IERS)
```


## EDITORIAL

This issue of the IAU Information Bulletin contains a minor but important modification: in this and all future IBs you will find on the inside back cover a list of the Presidents and their addresses of the eleven IAU Divisions. Hence each printed IB will now give as a quick reference the addresses of EC Members (on the inside front cover) and of the Division Presidents (on the inside back cover). The address of the Paris IAU office remains on the back page of the Bulletin.

This Bulletin also marks the halfway point in time between the XXIInd and XXIIIrd General Assemblies. Most of the preparatory work for the XXIIIrd General Assembly will have to take place during the year 1996. For this new year I would like to express to the members of our Union my very best wishes for all their scientific and private activities.

November 1995
Immo Appenzeller
General Secretary

## IN MEMORIAM

## Edith A. Mueller

Edith A. Mueller, General Secretary of the IAU from 1976 to 1979 and member of the IAU Executive Committee from 1973 to 1982 died from a heart attack during a holiday trip to Spain on July 24,1995 . She was 77 years old.

Edith Mueller was a truly international scientist. She was born on February 5, 1918 in Madrid, Spain, where she also started her education. She later obtained a diploma in Physics and Mathematics and (in 1943) a Ph.D. at the University of Zuerich, Switzerland. After various research positions at Zuerich, Cambridge (UK), Ann Arbor (Michigan, USA) and Basel (Switzerland) she was appointed
associate professor at the University of Neuchatel before moving to Geneva, where she became a full professor in 1973. Edith Mueller also taught as a visiting professor at the Universities of Kiel (Germany) and Utrecht (The Netherlands).

Scientifically Edith Mueller is well remembered for her important work in the field of Solar and Stellar spectroscopy. Among her major results are accurate derivations of element abundances in the Solar atmosphere, which turned out to be of great cosmological significance.

Even after her retirement in 1983 Edith Mueller remained active in many national and international scientific organisations and committees. From 1979 to 1985 she served as the President of the Swiss National Committee for the IAU, from 1985 to 1988 she was the President of the IAU Commission 38 (Exchange of Astronomers).

Those who have met Edith Mueller will remember her as an eminent astronomer, teacher and organiser with an open mind and an exceptional kindness. Her colleagues and the international astronomical community will miss Edith Mueller very much.

```
*******************************************************************************
1. GENERAL ASSEMBLIES
1.1. THE XXIIIRD GENERAL ASSEMBLY, KYOTO, JAPAN,
                        AUGUST 18-30, 1997
The preparations for the XXIIIrd General Assembly are proceeding smoothly in
Japan and at the IAU office. The Local Organising Committee has been
completing its negotiations with the meeting venue, the Kyoto International
Conference Center, which is located beautifully at the shore of a lake in the
northern outskirts of Kyoto. Moreover, block bookings for the General Assembly
participants have been initiated in Kyoto. The IAU Office has received first
travel grant applications (deadline February 15, 1997) and is preparing to receive
proposals for the Joint Discussions and other events at the General Assembly
(deadline April 15, 1996).
A comprehensive list of all deadlines concerning the XXIIIrd General Assembly
is repeated below.
1.2. GENERAL DEADLINES FOR THE XXIIIRD GENERAL
    ASSEMBLY
Submission of proposals for GA Symposia
to the IAU Assistant General Secretary April 15, 1996
Submission of proposals for GA JDs
to the IAU General Secretary April 15, 1996
EC meeting to decide about Symposia and JDs June 1996
Notification of Symposia and JD SOCs July 1, 1996
Submission of preliminary programme of GA Symposia, JDs, etc. September 1, 1996
Special IB with GA preliminary programme, announcements
concerning grants, registration forms, local information October 1996
Submission of Symposium grant applications to
Symposium SOCs February 15, 1997
Submission of GA grant applications to General Secretary February 15, 1997
```

Submission of Abstracts to Symposium/JD SOCs
Notification of the grant applicants
Last day for Early Registration
Beginning of meeting
End of meeting
1.3. ADDITIONAL DEADLINES FOR ADHERING ORGANISATIONS,
1.3. ADDITIONAL DEADLINES FOR ADHERING ORGANISATIONS, COMMISSIONS AND DIVISIONS

| Proposals for new IAU members from Commissions and <br> Divisions | November 15,1996 |
| :--- | :--- |
| Submission of new Budget to Adhering Organisations | December 15,1996 |
| Submission of resolutions with financial implications | February 15,1997 |
| Proposals for new members from Adhering Organisations | March 15,1997 |
| Proposals for GA agenda | March 15,1997 |
| Submission of resolutions without financial implications | May 15,1997 |

2. EXECUTIVE COMMITTEE
2.1. 67 TH MEETING OF THE IAU EXECUTIVE COMMITTEE

The 67 th Meeting of the IAU EC took place on August 18-21 at Mount Stromlo
Observatory, Canberra, Australia, following the kind invitation by Prof. J. Mould, Director of the Mount Stromlo and Siding Spring Observatories, and Prof.
D. Mathewson, Vice-President of the Union. Drs. C. Anguita and F. Pacini were unable to attend. All other members of the EC took part in the meeting.

Among the main issues addressed at this EC meeting were:

- proposals for modifications in the Statutes, Bye-Laws and Working Rules of the Union to formalize the IAU Divisions, to clarify the procedures for nominating new individual members of the Union, and to improve the procedures for proposing resolutions to the General Assemblies;
- the appointment of a new Working Group of the Executive Committee for Future Large Scale Facilities (for details, see Section 4 of this Bulletin);
- plans considered by UNESCO and a private enterprise to produce a bright artificial star (Star of Tolerance) by launching a large balloon satellite.

Concerning the last point the EC asked the IAU President to contact the Director General of UNESCO and to protest against these plans on behalf of the astronomical community.

Moreover, the EC discussed and rated the proposals for new IAU Symposia and Colloquia. Details on the approved meetings are given in Section 5 of this Bulletin.

### 2.2. 68TH MEETING OF THE IAU EXECUTIVE COMMITTEE

The 68th meeting of the IAU Executive Committee is scheduled for June 1996. Matters to be submitted to this meeting should reach the office of the General Secretary before April 15, 1996. As usually, matters concerning submission of meetings must be directed to the Assistant General Secretary, for the same deadline.

## 3. DIVISIONS: WORLD WIDE WEB

The IAU Office is pleased to report that the Division VI (Interstellar Matter), X (Radio Astronomy) and XI (Space and High Energy Astrophysics) have now added their own homepages to the IAU WWW server. These new sections provide news and announcements from the Divisions as well as basic information on their scope and activities

## 4. COMMISSION MATTERS

4.1. NEW EC WORKING GROUP

At its 67th Meeting in Canberra the IAU Executive Committee decided to establish a new EC Working Group for "Future Large Scale Facilities". The proposal for this new working group originated from the special session on this topic at the XXIInd General Assembly in The Hague. The new Working Group will consist of the following members appointed by the IAU Executive Committee: H. Butcher (Chairperson), R. Ekers, B. Fort, N. Kardashev, M. Longair, F. Pacini, L. Rodriguez, G. Swarup, Y. Tanaka, H. Tananbaum and L. Woltjer (IAU President, ex officio).

### 4.2. WORKING GROUP FOR THE WORLDWIDE DEVELOPMENT OF ASTRONOMY

Vietnam is expanding its astronomy by several university positions (research and teaching) and an astronomy course in the last year of high school (physical sciences branch). Since Vietnam has been very isolated astronomically, two types of events were scheduled: a seminar on astrophysics was organized to demonstrate the breadth of modern astronomy on October 23 and 24 in Ho Chi Minh City, which reached mainly some 100 scientists from all over Vietnam, gathered to view the total solar eclipse of October 24 , and a course in Astrophysics, organized at the National University of Vietnam in Hanoi on October 30 and 31 , which reached mainly some 100 physics students. Official notice was taken of both events which were supported by France and the IAU.

## 5. SCIENTIFIC \& EDUCATIONAL ACTIVITIES <br> 5.1. COMMISSION 38: EXCHANGE OF ASTRONOMERS

IAU TRAVEL GRANTS: GUIDELINES

Within the limitations imposed by the budget of the Commission as approved by the Executive Committee of the International Astronomical Union, funds are available to Commission 38 toward grants to qualified individuals to enable them to visit institutions abroad. It is intended, in particular, that the visitors shoul have ample time and opportunity to interact with the intellectual life of the host institution so that maximum benefit is derived by both sides. It is a specific objective of the programme that astronomy in the home country be enriched after the applicant returns.

1. Candidates may be faculty/staff members, post-doctoral fellows, or graduate students at any recognised educational/research institution or observatory. All candidates must have an excellent record of research and must have made permanent and professional commitments to astronomy. The programme is designed to support both the work of young astronomers and established astronomers whose visits may benefit the country or institution visited. It is emphasised that all recipients should return to their home institutions or home countries upon the completion of their visits.
2. All visits must normally consist of a stay of at least 3 months at a single 1 institution. In special cases, shorter visits can be considered; stopover at other institutions en route may be permitted.
3. All visits must be formally agreed to by the Directors of the home and host institutions involved. Such endorsements must confirm that the proposed plan of study is a reasonable one and will be of benefit to astronomy.
4. All applicants must give details of funds currently available to her/him to finance her/his proposed visit including supporting documents. In particular, s/he must state what other applications s/he has submitted in efforts to obtain support from other sources and the status of such applications. In the event that an applicant receives funds, which may be used, in whole or in part, for the same proposed purpose from another source, s/he is required to revise her/his application or make a refund to the IAU. If dependants are to accompany the applicant, details must be given.
5. The amount of the grant will be governed by the cost of one return economy air fare and limited to the least expensive fare (such as PEX, APEX, etc.) between home and host institutions and normally is to be used by the applicant for such travel. With prior approval, the funds can instead be used wholly or in part for subsistence costs during the visit.

Some grants may be awarded on the basis of a one-way fare. An example is the case where highly qualified graduate students apply for funds to go abroad to begin graduate studies at an institution where they have been formally accepted.
6. Grants to attend symposia, summer schools, conferences, society meetings, etc. are outside the scope of the programme.

Grants will not normally be made for the sole purpose of obtaining observational data.

An individual should normally not expect to receive an IAU award for a second visit.
7. Each recipient is required to submit a brief report to the President of Commission 38 after her/his return from the visit. Acknowledgement of support from the Exchange of Astronomers Programme of the IAU should be made in any published paper resulting from the visit.

Application Procedure

1. An individual who wishes to apply for a grant under the IAU Exchange of Astronomers Programme should read the rules carefully to ensure that the circumstances of her/his case conform to the conditions under which IAU
grants can be made. S/he should then proceed by formally submitting her/his request for a grant in the form of a letter to the President of Commission 38 (see ' 4 , below).

Each candidate must submit a curriculum vitae showing that s/he is professionally qualified, and must submit a viable plan of scholarly activity to be carried out during the visit.

The information supplied in those documents should be complete and detailed as it will be used to judge whether the proposal is in conformity with the aims of the programme, whether the minimum initial requirements are being met, and whether the guidelines will permit a favourable decision. Any special circumstances must be carefully set forth.
2. It is the applicant's responsibility to arrange for the two confidential lett endorsement from senior officials of the home and host institutions. These are to be sent without delay directly to the President of Commission 38. The letters from both institutions should confirm that the applicant's proposed visit has the knowledge and support of the directors or senior academic/research officers of the institutions involved. Further they should state whether the applicant will be returning to a position at the home institution at the conclusion of the visit. Finally, they should confirm to the President of Commission 38 that the senior officials themselves have made every effort to obtain the necessary travel funds from their own institutions and from other resources within the respective countries.

The applicant must state who is responsible for her/his subsistence during the prolonged visit at the host institute, i.e. subsistence paid by the home or by the host institute, by a grant or fellowship or by any other means. Copies of the relevant documents should be submitted with application. In addition the applicant should provide information on the lowest available travel fare required.
3. As noted above, care should be taken to make the application as complete as possible and to include detailed statements rather than generalities. Material should be typed and single spaced. The application will be considered as quickly as possible, but it should be recognised that information and opinions must be exchanged among the President, Vice-Presidents, and/or other Members of the Organising Committee of Commission 38.
4. In summary, the application should include:
i. plan of scientific activity,
ii. curriculum vitae,
iii. letters of support from home and host institutions,
iv. information on responsibility for subsistence at the host institution,
v. information on lowest available travel fare.
and should be submitted in time for the Officers of the Commission to consult by post.
5. All correspondence, including the endorsements referred to above, should be directed to the President of Commission 38, International Astronomical Union, with copy to the Vice-President. For the period August 1994July 1997, the addresses are:

President Vice-President


### 5.2. COMMISSION 46: TEACHING OF ASTRONOMY

5.2.1. 22nd International School for Young Astronomers, Brazil

Report on the International School for Young Astronomer (ISYA)
July 9 - 29, 1995, Belo Horizonte, Brazil, by Michele Gerbaldi, Assistant Secretary for the ISYA

This 22nd ISYA took place in Belo Horizonte, Brazil. More precisely, the first two weeks have been held at the Federal University of Minas Gerais (UFMG) in Belo Horizonte and the third week at the Observatory Serra Piedade, located at some 50 kms from Belo Horizonte, at an altitude of about 1800 m . This Observatory is run by the Astronomical Group of the ICEx (Department of Physics).

The Brazilian sponsors were the UFMG, CNPq (Centre Nacional da Pesquisa ) and the FAPEMIG. The IAU supported travel expenses (amounting to about USD 22 000) whereas Brazil bore the costs for hotel, meals, transportation and meeting.

The Local Organizing Committee was chaired by Prof. Renato Las Casas whereas Prof. Tulio Jorge dos Santos was the co-chairman. The members of the LOC were : Rodrigo Dias Tarsia, Domingo S. de Lima Soares, Luis Themystokliz Sanctos Mendes and Bernardo Reidel.

The foreign faculty invited were :
Dr. Craig Gullixson CCD Detectors (National Solar Observatory, USA)
Dr. Jens Knude Interstellar Medium (Copenhagen University Observatory, Denmark)
Dr. Reynier Peletier Galaxies
(Kaptein Astronomical Institut, Netherlands)
Dr. John Percy Teaching of Astronomy \& Variables stars (Toronto University, Canada
and President of the IAU Commission 46
"Teaching of Astronomy"
Dr. Bo Reipurt Star Formation (ESO, Chile)
Dr. Silvia Torres Peimbert Practical Astronomy, Observations (Observatorio Astronomico Nacional, Mexico)
Dr. Michele Gerbaldi Teaching of Astronomy and
Institut d'Astrophysique de Paris and Practical Observations niversite de Paris Sud, France

The Brazilian faculty consisted in:
Dr. Silvia Livi, Porto Alegre University Teaching of Astronomy
Dr. Rute Trevisan, Londrina University Teaching of Astronomy
Dr. Luis Paulo Vaz, UFMG, Belo Horizonte Stellar Evolution
Two seminars were given by the Brazilian faculty of Belo Horizonte University :
Dr. Quiroga Climatic Evolution
Dr. Soares Binary Galaxies
75 applications were received out of them 17 came from East Europe countries, India, Vietnam and Nigeria, showing the impact of previous ISYAs.

Thanks to the important financial contribution from the Brazilian authorities obtained by Prof. Renato Las Casas, 20 foreign participants were invited ( 12 men and 8 women). One participant from Mexico had to cancel his coming at the last minute. The participants came from Argentine (3), Bolivia (1), Chile (2), Colombia (1), Cuba (1), Mexico (1), Paraguay (2), Peru (3), Uruguay (4) and Spain (2).

27 students participated in the school, out of them 19 were Brazilian ( 7 women,
12 men).
The background of the 38 participants ranged from still under-graduate students
(4) to students being preparing since about one year their Ph. D. (9). Some of them had previous experience in teaching at high school level or had been involved in Training the School Teachers at the University. Some of the participants had already observed with large telescopes.

Participants gave talks on Teaching Astronomy in their country, at any level. This gave rise to vigourous discussions on the various methods presented. Three sessions on data reduction (Echelle spectra) were organized, using Workstations of the Physics Department. Research talks were given. Articles provided by a faculty member were also discussed by the participants.

Six nights were devoted to practical observations at the Observatory where two telescopes were available: a refractor of $15 \mathrm{~cm}(\mathrm{f} / 15)$ and a reflector of 60 cm (f/12.5).

Textbooks and reprints brought by the foreign faculty on various topics including teaching astronomy were largely used by all the participants.

Several public talks were given by the faculty members: they were presented either in Spanish, English or French and simultaneously translated into Portuguese. Three talks were organized by the Amateur Astronomical Society and given at Ouro Preto, whereas 4 talks were given at Belo Horizonte (Cultural Center of the University).

For some students, their participation to this ISYA has definitely oriented their future studies.

### 5.2.2. Teaching for Astronomy Development (TAD)

Announcements regarding TAD were sent to 30 people in 19 countries with a finite but low level of astronomy and who might wish to enhance their astronomy. Follow-up letters were sent to 13 people in 12 countries, noting that proposals are due in the office of the committee secretary by January 2, 1996. The committee is to prepare a recommendation for the IAU Executive Committee by April 15, 1996.

The members of the committee to evaluate TAD proposals are:
Armando Arellano Ferro University of Guanajuato, Mexico
Giuseppe Longo Osservatorio Astronomico di Capodimonte, Napoli, Italy
Derek McNally University of London Observatory, U.K
John R. Percy, TAD Chair University of Toronto, Canada; ex officio (president, IAU Commission 46)
Rameshwar P. Sinha Giant Meterwave Radio Telescope, Pune, India
Donat G. Wentzel, TAD Secretary University of Maryland, USA

```
5.3.1. Deadline
```

```
Proposals for IAU Symposia, Colloquia, Regional Meetings,
and co-sponsored meetings planned for }1997\mathrm{ should reach
the Assistant General Secretary (see address on inside cover page)
no later than April 15, 1996
in order to be considered at the 1996 Executive Committee meeting.
Proposals should be complete, with all supporting documents, at that time.
Applicants should note that the Rules for IAU Scientific Meetings
are being revised. The revised version (Dec. 1995),
including the meeting proposal and travel grant application forms,
will be made available on the WWW as of January 1, 1996.
```

5.3.2. Future IAU Symposia
Symposium 177 THE CARBON STAR PHENOMENON
May 27 - 31, 1996, Antalya, Turkey.
See IB 74, p. 54.
Symposium 178 MOLECULES IN ASTROPHYSICS: PROBES AND PROCESSES
July 1 - 5, 1996, Leiden, Netherlands.
Scientific Organising Committee: L. Avery (Canada), L. Blitz (USA),
R.D. Brown (Australia), A. Dalgarno (USA), E.F. van Dishoeck
(Netherlands), Aa. Hjalmarsson (Sweden), H. Kroto (UK), A. Leger (France),
Y.C. Minh (Korea), P.D. Singh (Brazil), S.P. Tarafdar (India), T. Tsuji
(Japan), D.A. Williams (UK, Chairperson) \& Q. Zeng (China PR).
Principal Topics:

- Molecules in star-forming regions
- Physics and chemistry of shocks, jets, PDRs, masers
- Chemistry in circumstellar disks and connection with solar nebula
- Comets and the Jupiter impact
- Diffuse interstellar clouds
- Molecules in nearby galaxies and at high redshift
- Chemistry in circumstellar envelopes around late-type stars
- Basic molecular processes
Chairperson, Local Organising Committee: E.F. van Dishoeck.
Contact address: E.F. van Dishoeck, Leiden Observatory, P.O. Box 9513,
NL 2300 RA Leiden, The Netherlands.
Tel: 31-71-275833
Fax: 31-71-275819
E-mail: symp96@strw.LeidenUniv.nl
Symposium 179 NEW HORIZONS FROM MULTI-WAVELENGTH SKY
SURVEYS
August 26 - 30, 1996, Baltimore, USA.
Scientific Organising Committee: P. Benevides Soares (Brazil), H. Bloemen
(Netherlands), N. Brosch (Israel), Chen J.-S. (China PR), G. Djorgovski
(USA), N. Epchtein (France), G. Hassinger (Germany), B.M. Lasker (USA,

```
co-Chairperson), H. MacGillivray (UK, co-Chairperson), F. Mignard
(France), S. Okamura (Japan), A. Robin (France), M. Tsvetkov (Bulgaria) &
A. Wright (Australia).
Principal Topics:
- Multiwavelength surveys (radio, IR, optical, UV, X-ray and Gamma-ray)
- Correlations of multiwavelength data
- Sky surveys applied to astrophysical problems: Galactic structure,
extragalactic astronomy, and rare objects
- Coordination and scheduling of present and future programs
- Flux and positional calibrations for sky surveys; completeness issues
- Processing large data volumes at high rates
- Archiving, data distribution, and network access
Chairperson, Local Organising Committee: M. Postman.
Contact address: B.M. Lasker, Space Telescope Science Institute, 3700 San
Martin Drive, Baltimore, MD 21218, USA.
Phone: 1 410 3384840
Fax: 1 410 338 5075
E-mail: lasker@stsci.edu
Symposium 180 PLANETARY NEBULAE
August 26 - 30, 1996, Groningen, The Netherlands.
Scientific Organising Committee: A. Acker (France), M.J. Barlow (UK),
S. Deguchi (Japan), M. Dopita (Australia), H. Habing (Netherlands), S. Heap
(USA), G. Jacoby (USA), J.B. Kaler (USA), R.-P. Kudritzki (Germany),
S. Kwok (Canada), H. Lamers (Netherlands), W. Maciel (Brazil),
A. Manchado (Spain), M. Peimbert (Mexico, Chairperson), A. Renzini (Italy)
& Y. Terzian (USA).
Principal Topics:
- Distances to Galactic PN
- Properties of the central stars
- Properties of the envelopes
- Evolution of PN:
    a: from Asymptotic Giant Branch stars to PN
    b: from PN to White Dwarfs
- PN in extragalactic systems
- Distances to extragalactic PN
Chairperson, Local Organising Committee: P. Wesselius.
Contact address: M. Peimbert, Instituto de Astronomma, UNAM,
Apdo. Postal 70-264, Mexico 04510 D.F., Mexico.
Phone: 1 525 622 3900
Fax: 1 525 616 0653
E-mail: peimbert@astroscu.unam.mx
```

Symposium 181 SOUNDING SOLAR AND STELLAR INTERIORS
September 30 - October 3, 1996, Nice.
Scientific Organising Committee: R.M. Bonnet (France, Chairperson), C. Chiuderi (Italy), G. Debouzy (France), S. Frandsen (Denmark),
C. Froehlich (Switzerland), A. Gabriel (France), D. Gough (UK), J. Leibacher (USA), J.-C. Pecker (France,), T. Roca Cortes (Spain), E. Schatzman (France), P. Scherrer (USA) \& S. Vorontsov (Russia).

Principal Topics:

- Constraints on the internal constitution of the Sun
- Solar activity seen by helioseismology
- Solar rotation
- New insights brought by SOHO, GONG, and other networks
- Seismic constraints on stellar evolution theory
- Excitation mechanism of pulsation

Chairperson, Local Organising Committee: G. Berthomieu.
Contact address: G. Berthomieu, Observatoire de la Cote d'Azur, B.P. 229, F 06304 Nice Cedex 4, France.
Phone: 3392003051
Fax: $\quad 3392003121$
E-mail: astro96@obs-nice.fr

Symposium 182 HERBIG-HARO FLOWS AND THE BIRTH OF LOW-MASS
STARS
January 20-26, 1997, Chamonix, France.
Scientific Organising Committee: C. Bertout (France, co-Chairperson), K.-H. Boehm (USA), N. Calvet (Venezuela), M. Camenzind (Germany), J.E. Dyson (UK), S. Edwards (USA), G. Herbig (USA), A. Raga (UK), B. Reipurth (Chile, co-Chairperson) \& L.F. Rodriguez (Mexico).

Principal Topics:

- Properties and physics of Herbig-Haro flows
- Herbig-Haro flows and other PMS outflow phenomena
- Formation and properties of the driving sources of HH jets
- The physics of accretion/ejection events

Chairperson, Local Organising Committee: A. Castets.
Contact address: B. Reipurth, European Southern Observatory, Casilla
19001, Santiago 19, Chile.
Phone: 5622285006
Fax: 5622285132
E-mail: breipurt@eso.org
5.3.3. Future IAU Colloquia

Colloquium 160 PULSARS: PROBLEMS AND PROGRESS
January 8 - 12, 1996, Sydney, Australia.
See IB 74, p. 57.

Colloquium 159 EMISSION LINES IN ACTIVE GALAXIES: NEW METHODS AND
TECHNIQUES
June 17 - 20, 1996, Shanghai, China PR.
See IB 74, p. 58.

Colloquium 161 5TH INTERNATIONAL COLLOQUIUM ON BIOASTRONOMY:
ASTRONOMICAL AND BIOCHEMICAL ORIGINS AND THE SEARCH FOR LIFE IN
THE UNIVERSE
July 1 - 5, 1996, Capri, Italy.
Scientific Organising Committee: S. Bowyer (USA, Chairperson), A. Brack (France), R. Brown (Australia), A.C. Clarke (Sri Lanka), C. Cosmovici (Italy), F. Drake (USA), F. Dyson (USA), J. Heidmann (France), J. Jugaku (Japan), G.A. Lemarchand (Argentina), M.A. Marov (Russia), P. Morrison (USA), C. Sagan (USA), C. Townes (USA) \& D. Werthimer (USA).

Principal Topics:

- Organic molecules in the interstellar and interplanetary medium
- Planetary detection
- Atmospheres
- Catastrophic impacts in the solar system
- The origin and evolution of life and intelligence

```
- The search for extraterrestrial civilizations
Chairperson, Local Organising Committee: C. Cosmovici.
Contact address: S. Bowyer, Space Sciences Laboratory, University of
California, Berkeley, CA 94720-7450, USA.
Phone: 1 510 642 1648
Fax: 1 510 643 8303
E-mail: bowyer@ssl.berkeley.edu
```

Colloquium 162 NEW TRENDS IN ASTRONOMY TEACHING
July 8 - 12, 1996, London and Milton Keynes, UK.
Scientific Organising Committee: L. Abati (Italy), J. Fierro (Mexico),
A. Fraknoi (USA), L. Gouguenheim (France, Chairperson), S. Isobe (Japan),
B. Jones (UK), D. McNally (UK), J. Narlikar (India), M. Othman (Malaysia),
J. Percy (Canada), B. Warner (South Africa) \& R. West (Denmark).
Principal Topics:

- Astronomy education at university
- Distance learning and electronic media in astronomy teaching
- Learning patterns and learning problems in teaching astronomy
- Education in the planetariums and science centres
- School education in astronomy from kindergarten to pre-university entry
- Improving the public understanding of astronomy
- Materials to support astronomy teaching
Chairperson, Local Organising Committee: D. McNally.
Contact address: D. MacNally, University of London Observatory, Mill Hill
Park, London NW7 2QS, UK.
Phone: 441819590421
Fax: 441819064161
E-mail: dmn@star.ucl.ac.uk

Colloquium 163 ACCRETION PHENOMENA AND RELATED OUTFLOWS
July 15 - 19, 1996, Port Douglas, Queensland, Australia.
Scientific Organising Committee: G. Bicknell (Australia, co-Chairperson),
L. Ferrario (Australia), K. Freeman (Australia), J. Hawley (USA), A. Kinney
(USA), R. Narayan (USA), R. Sunyaev (Russia), B. Warner (South Africa),
R. Wehrse (Germany) \& D.T. Wickramasinghe (Australia, co-Chairperson).
Principal Topics:

- Physics of accretion disks
- Numerical simulations of disks
- Young stellar objects
- Cataclysmic variables
- Discs and magnetic fields
- Discs in active galactic nuclei
- Outflows from accretion discs
Chairperson, Local Organising Committee: L. Ferrario.
Contact address: D.T. Wickramasinghe, ANU Astrophysical Theory Centre,
Australian National University, Canberra, ACT 0200, Australia.
Phone: 6162494296
Fax: 6162495549
E-mail: dayal@cygnus.anu.edu.au

```
Colloquium 164 RADIO EMISSION FROM GALACTIC AND EXTRAGALACTIC
COMPACT SOURCES
April 28 - May 2, 1997, Socorro, NW, USA.
```

```
Scientific Organising Committee: R. Ekers (Australia), L. Gurvits
(Russia/Netherlands), M. Inoue (Japan), J. Moran (USA), G. Nicolson (South
Africa), L. Padrielli (Italy), R. Schilizzi (Netherlands), P. Wilkinson (UK),
A. Witzel (Germany), Wu Shengyin (China PR) & A. Zensus (USA,
Chairperson).
Principal Topics:
- VLBI observations of galactic and extragalactic objects
- VLBI capabilities and enhancement options
- International VLBI developments
- VLBI computational issues
- Frontier and future developments
Chairperson, Local Organising Committee: J.M. Wrobel.
Contact address: A. Zensus, National Radio Astronomy Observatory, 520
Edgemont Road, Charlottesville, VA 22903-2475, USA.
Phone: 1 804 296 0231
Fax: 1 804 296 0278
E-mail: azensus@nrao.edu
```

Colloquium 165 DYNAMICS AND ASTROMETRY OF NATURAL AND ARTIFICIAL
CELESTIAL BODIES
July 1 - 5, 1996, Poznan, Poland.
Scientific Organising Committee: V. Abalakin (Russia), J.-E. Arlot (France),
F. Barlier (France, co-Chairperson), S. Debarbat (France), B. Kaufman
(USA), B. Kolaczek (Poland), K. Kurzynska (Poland, co-Chairperson),
J. Lieske (USA), A. Milani (Italy), X. Newhall (USA), Y. Requieme
(France), H. Rickman (Sweden), K. Seidelman (USA), M. Soffel (Germany),
E. Wnuk (Poland) \& M. Yoshizawa (Japan).
Principal Topics:

- Ephemerides, reference systems and astronomical standards
- New observational techniques, catalogues and astrometry from
HIPPARCOS
- Solar system dynamics
- Rotational motion of solar system objects
- Dynamics and observational problems of artificial satellites and space
debris
- Relativity in dynamics and astrometry
- New mathematical techniques
Chairperson, Local Organising Committee: I. Wytrzyszczak
Contact address: A. Krzyszczynska, Astronomical Observatory of
A. Mieckiewicz University, ul. Sloneczna 36, PL 60286 Poznan, Poland.
Phone: 4861679670
Fax: $48 \quad 61 \quad 536536$
E-mail: astro@phys.amu.edu.pl
5.3.4. Future Regional Astronomy Meetings
VIIITH LATIN-AMERICAN REGIONAL ASTRONOMY MEETING
November 27 - December 1, 1995, Montevideo, Uruguay.
See IB 73, p. 18-19, and IB 74, p. 58.

```
VIITH ASIAN-PACIFIC REGIONAL ASTRONOMY MEETING
August 19 - 23, 1996, Pusan, Korea R.
Scientific Organising Committee: G. Ai (China PR), J. Andersen (IAU, ex
officio), E. Budding (New Zealand), S.M. Chitre (India), M.S. Chun
(Korea R), L. Cowie (USA), B. Hidayat (Indonesia), S. Ikeuchi (Japan),
H.M. Lee (Korea R, Chairperson), Li Q.B. (China PR), J. Monaghan
(Australia), J. Mould (Australia), J. Narlikar (India), S. Okamura (Japan),
H.M. Tovmassian (Armenia) & C. Yuan (China R).
Principal Topics:
- Sun and solar system
- Stellar astronomy
- Interstellar medium and Galactic astronomy
- Extragalactic astronomy and Active Galactic Nuclei
- Large scale structure and cosmology
- High energy astrophysics
- Instruments
- History and education
Chairperson, Local Organising Committee: H.B. Ann.
Contact address: Secretariat, IAU Regional Meeting, Dept. of Earth
Sciences, Pusan National University, Pusan, 609-735, Korea R.
Phone: 82 51 510 2702 (1626 for message)
Fax: 82 51 513 7495
E-mail: iauap@astrophys.es.pusan.ac.kr
5.3.5. Future Technical Workshop
STATISTICAL CHALLENGES IN MODERN ASTRONOMY II
June 2 - 5, 1996, University Park, PA, USA.
Scientific Organising Committee: G.J. Babu (USA, co-Chairperson),
P. Bickel (USA), B. Efron (USA), E.D. Feigelson (USA, co-Chairperson),
R. Hanisch (USA), W. Jefferys (USA), F. Murtagh (Germany), W. Press
(USA), B. Ripley (UK) & G. Yang (USA).
```

Principal Topics:

- Introduction to statistics
- Time series analysis
- Galaxy clustering
- Multivariate analysis
- Other topics
- Bayesian methods
- Statistical software for astronomy
- Statistical challenges from major new astronomical projects
Chairperson, Local Organising Committee: E.D. Feigelson.
Contact address: E. Feigelson, Department of Astronomy \& Astrophysics,
Pennsylvania State University, 525 Davey Laboratory, University Park,
PA 16802-6305, USA.
Phone: 18148650162
Fax: $\quad 18148633399$
E-mail: edf@astro.psu.edu
5.3.6. Co-Sponsored Meetings
31ST COSPAR SCIENTIFIC ASSEMBLY AND ASSOCIATED EVENTS

```
July 14 - 21, 1996, Manchester, UK.
ICSU co-sponsoring organisation: COSPAR.
```

Principal sessions of interest to IAU members:

- Comparative studies of Moon and Mercury
- Spacecraft exploration of the outer solar system
- Galileo initial results and future prospects
- Energy sources in the planets and other bodies in the solar system
- Space exploration of cometary nuclei
- Space debris
- Reconnection in the solar corona and magnetospheric substorms
- Gamma-ray bursts
- Pulsars: Satellite and ground-based studies of radio pulsars

```
Contact address: COSPAR, 51 Bd. de Montmorency, F }75016\mathrm{ Paris, France.
Phone: 33 1 4525 0679
Fax: 33 1 4050 9827
E-mail: COSPAR@paris7.jussieu.fr
```

SCOSTEP-IAU-COSPAR Meeting: THIRD SOLTIP SYMPOSIUM ON SOLAR
TRANSIENT AND INTERPLANETARY PHENOMENA
October 14-18, 1996, Beijing, China PR.
ICSU co-sponsoring organisations: SCOSTEP, COSPAR.
Scientific Organising Committee: S. Ananthakrishnan (India), A. Bhatnagar
(India), J.-L. Bougeret (France), J.-K. Chao (China R), M. Dryer (USA,
Chairman), S. Fischer (Czech R), E. Flueckiger (Switzerland), M. Kojima
(USA), G. Mann (Germany), D. Michels (USA), V. Obridko (Russia),
G. Poletto (Italy), V. Rusin (Slovak R), B. Sanahuja (Spain), R. Schwenn
(Germany), M.A. Shea (USA), M. Storini (Italy), I. Veselovsky (Russia),
S. Wang (China PR, co-Chairman), T. Watanabe (Japan), F.S. Wei
(China PR, co-Chairman) \& S.T. Wu (USA, co-Chairman).
Principal Topics:

- Progress on 3D MHD simulation of data obtained during SOLTIP
campaigns with in situ and IPS techniques
- New scientific results of 3D solar wind and IMF as deduced from
interplanetary missions (Ulysses, Yohkoh, Coronas, Wind, Interball, Soho)
- Progress on theory of steady-state and disturbed solar wind and
solar/interplanetary origins of energetic particles
- Interaction between models and observations on dynamic CMEs as
observed by spacecraft coronagraphs, X-ray imagers, in situ, and remote
sensing
- Deduction of solar magnetic topology of the corona via use of MHD
models and observations by Soho, Yohkoh, and Coronas
- Response of space environment to solar and interplanetary transient
processes
Contact address: M. Dryer, SOLTIP, NOAA-SEL, 325 Broadway, Boulder,
CO 80303, USA.
Phone: 13034973978
Fax: 13034973645
E-mail: mdryer@sel.noaa.gov

```
6. OTHER SCIENTIFIC MEETINGS OF INTEREST TO
    IAU MEMBERS
NEW EXTRAGALATIC PERSPECTIVES IN THE NEW SOUTH AFRICA
January 22 - 26, 1996, Wits, South Africa.
Contact address: D.L. Block, Dpt Computational & Applied Mathematics,
Witwatersrand University, Box 60, ZA }2050\mathrm{ Johannesburg, Wits, South
Africa.
Tel: 27 11 716 3761
Fax: 27 11 339 7965
E-mail block@gauss.cam.wits.ac.za
HIGH SENSITIVITY RADIO ASTRONOMY
January 22 - 26, 1996, Macclesfield, Cheshire, UK.
Contact address: Janet Eaton, University of Manchester, Nuffield Radio
Astronomy Laboratories, Jodrell Bank, Macclesfield, Cheshire SK 11 9DL,
UK.
Tel: 44 1477 471 321
Fax: 44 1477 571 618
E-mail: hsra@jb.man.ac.uk
WORKSHOP ON BLAZAR VARIABILITY IN HONOR OF DR. ALEX G. SMITH
February 4 - 7, 1996, Miami, Florida, USA.
Contact address: James R. Webb, Dept. of Physics, Florida International
University, University Park, Miami, FL 33199, USA.
Tel: 1 305 348 2605
Fax: 1 305 348 3053
E-mail: webbj@quasar.fiu.edu
FOURTH CTIO/ESO WORKSHOP ON THE GALACTIC CENTER
March 10 - 15, 1996, La Serena, Chile.
Contact address: R. Gredel or J. Melnick, ESO, Casilla 19001, Santiago 19,
Chile, or R. Schommer, CTIO, Casilla 603, La Serena, Chile.
Tel: 56 2 228 5006
Fax: 56 2 228 5132
E-mail: rgredel@eso.org or jmelnick@eso.org
    or schommer@ctiow7.ctio.noao.edu
```

```
X-RAY IMAGING AND SPECTROSCOPY OF COSMIC HOT PLASMAS
```

X-RAY IMAGING AND SPECTROSCOPY OF COSMIC HOT PLASMAS
March 11 - 14, 1996, Tokyo, Japan.
March 11 - 14, 1996, Tokyo, Japan.
Contact address: F. Makino, Institute of Space and Astronautical Science,
Contact address: F. Makino, Institute of Space and Astronautical Science,
3-1--1 Yoshinodai, Sagamihara, Kanagawa 229, Japan.
3-1--1 Yoshinodai, Sagamihara, Kanagawa 229, Japan.
Tel: 81 427 51 3911*2621
Tel: 81 427 51 3911*2621
Fax: 81 427 59 4253
Fax: 81 427 59 4253
E-mail: ascasymp@astro.isas.ac.jp
E-mail: ascasymp@astro.isas.ac.jp
WWW: http://www.astro.isas.ac.jp/
WWW: http://www.astro.isas.ac.jp/
INFRARED SPACE INTERFEROMETRY WORKSHOP
INFRARED SPACE INTERFEROMETRY WORKSHOP
March 11 - 14, 1996, Toledo, Spain.
March 11 - 14, 1996, Toledo, Spain.
Contact address: C. Eiroa, Depto. Fisica Teorica, C-XI, Facultad de
Contact address: C. Eiroa, Depto. Fisica Teorica, C-XI, Facultad de
Ciencias, Universidad Autonoma de Madrid, Cantoblanco, E - 28049 Madrid,
Ciencias, Universidad Autonoma de Madrid, Cantoblanco, E - 28049 Madrid,
Spain.
Spain.
Tel: 34 1 397 5567
Tel: 34 1 397 5567
Fax: 34 1 397 3936
Fax: 34 1 397 3936
E-mail: irinter@astrol.ft.uam.es or irinter@laeff.esa.es
E-mail: irinter@astrol.ft.uam.es or irinter@laeff.esa.es
XVITH MORIOND ASTROPHYSICS MEETING ON MICROWAVE BACKGROUND
XVITH MORIOND ASTROPHYSICS MEETING ON MICROWAVE BACKGROUND
ANISOTROPIES
ANISOTROPIES
March 16 - 23, 1996, Les Arcs, France.
March 16 - 23, 1996, Les Arcs, France.
Contact address: Moriond Astrophysics Meeting, CMB Conference, IAP
Contact address: Moriond Astrophysics Meeting, CMB Conference, IAP
CNRS, 98bis Bd Arago, F }75014\mathrm{ Paris, France.
CNRS, 98bis Bd Arago, F }75014\mathrm{ Paris, France.
Fax: 33 1 4432 8001

```
Fax: 33 1 4432 8001
```

```
E-mail: cmbconf@iap.fr
27TH ANNUAL LUNAR AND PLANETARY SCIENCE CONFERENCE
March 18 - 22, 1996, Houston, Texas, USA.
Contact address: LeBecca Simmons, Johnson Space Center, Houston, TX
77058, USA.
Tel: 1 713 483 3111
E-mail: simmons@lpi.jsc.nasa.gov
OUR GALAXY
March 28 - 29, 1996, Moscow, Russia.
Contact address: Prof A.M. Cherepashchuk, Sternberg State Astronomical
Institute, Universitetskij Prosp. 13, 119899 Moscow, Russia.
Tel: 7 095 939 2858
Fax: 7 095 932 8841
E-mail: boch@astronomy.msk.su
```

ESO Workshop on THE EARLY UNIVERSE WITH THE VLT
April 1-4, 1996, Garching bei Muenchen, Germany.
Contact address: C. Stoffer, European Southern Observatory, Karl-
Schwarzschild-Strasse 2, D 85748 Garching bei Muenchen, Germany.
Tel: 4989320060
Fax: $\quad 49 \quad 89 \quad 320 \quad 06 \quad 480$
E-mail: VLT96@eso.org
THE 1996 UK NATIONAL ASTRONOMY MEETING
April 8 - 12, 1996, Liverpool, UK.
Contact address: Andrew J. Slavin, Astrophysics Group, Liverpool John
Moores University, Byrom Street, Liverpool, L3 3AF, UK
Fax: 441512312484
E-mail: nam96@starul.livjm.ac.uk
WWW: http://www.livjm.ac.uk/astro/
SOLAR AND HELIOSPHERIC PLASMA PHYSICS
May 13 - 18, 1996, Thessaloniki, Greece.
Contact address: SPM-96, Dept. of Physics, University of Thessaloniki,
GR 54006 Thessaloniki, Greece.
Tel: $\quad 3031998044$
Fax: $\quad 3031995384$
E-mail: spm-96@astro.auth.gr
WWW: http://wWW.astro.auth.gr/spm-96/main.html
WIDE FIELD SPECTROSCOPY
May 20-24, 1996, Athens, Greece.
Contact address: WIFISPE-96, Astronomical Institute of the National
Observatory of Athens, P.O. Box 20048, GR 11810 Athens, Greece.
Tel: $\quad 3013461191$
Fax: $\quad 3013421019$
E-mail: wifispe@atlas.uoa.ariadne-t.gr
THEORETICAL AND OBSERVATIONAL PROBLEMS RELATED TO SOLAR ECLIPES
June 4-8, 1996, Bucharest, Rumania.
Contact address: Dr. Magdalena Stavinschi, Astronomical Institute, Cutitul
de Argint 5, Box 28,R 75212 Bucharest, Rumania.
Tel: 4013356892
Fax: 4013373389
E-mail: mstavinschi@roimar.imar.ro

XVIIth International Conference on NEUTRINO PHYSICS AND ASTROPHYSICS June 13 - 20, 1996, Helsinki, Finland. Contact address: M. Roos, Dpt of Physics, P.O. Box 9, FIN 00014 , University of Helsinki, Finland.

```
Tel: 358 0 191 8440
Fax: 358 0 191 8366
E-mail: neutri96@phcu.helsinki.fi
SCIENCE WITH THE VLT INTERFEROMETER
June 18 - 21, 1996, Garching bei Muenchen, Germany.
Contact address: F. Paresce or O. von der Luehe, European Southern
Observatory, Karl-Schwarzschild-Strasse 2, D 85748 Garching bei
Muenchen, Germany.
Tel: 49 89 320 06 0
Fax: 49 89 320 06 480
E-mail: fparesce@eso.org or ovdluhe@eso.org
NUCLEI IN THE COSMOS IV
June 20 - 27, 1996, Notre Dame, Indiana, USA.
Contact address: M. Wiescher, Dept. of Physics, University of Notre Dame,
Notre Dame, IN 46556, USA.
Tel: 1 219 631 6788/7716
Fax: 1 219 631 5952
E-mail: nic.96@nd.edu
WWW: http://www.nd.edu/~nic96/
STELLAR ECOLOGY
June 23 - 29, 1996, Elba, Italy.
Contact addresses: R.T. Rood, Dpt of Astronomy, University of Virginia,
P.O. Box 3818, Charlottesville, VA 22903 0810, USA
Tel: 1 804 924 4904
Fax: 1 804 924 3104
E-mail: rtr@ninkasi.astro.virginia.edu
or
A. Renzini, European Southern Observatory, Karl-Schwarzschild-Strasse 2,
D 85748 Garching bei Muenchen, Germany
Tel: 49 89 320 06 0
Fax: 49 89 320 2362
E-mail: arenzini@aeso.org
```

```
CRITICAL DIALOGUES IN COSMOLOGY
```

CRITICAL DIALOGUES IN COSMOLOGY
June 24 - 27, Princeton, New Jersey, USA.
June 24 - 27, Princeton, New Jersey, USA.
Contact address: M. Fugill, Physics Dept., Jadwin Hall, Princeton
Contact address: M. Fugill, Physics Dept., Jadwin Hall, Princeton
University, P.O. Box 708, Princeton, NJ 08544-0708, USA.
University, P.O. Box 708, Princeton, NJ 08544-0708, USA.
Tel: 1 609 258 4317
Tel: 1 609 258 4317
Fax: 1 609 258 6853
Fax: 1 609 258 6853
E-mail: marion@pupgg.princeton.edu
E-mail: marion@pupgg.princeton.edu
DARK AND VISIBLE MATTER IN GALAXIES AND COSMOLOGICAL
DARK AND VISIBLE MATTER IN GALAXIES AND COSMOLOGICAL
IMPLICATIONS
IMPLICATIONS
June 25 - 28, 1996, Sesto Pusteria, Bolzano, Italy.
June 25 - 28, 1996, Sesto Pusteria, Bolzano, Italy.
Contact address: Massino Persic \& Paolo Salucci, SISSA, via Beirut 4,
Contact address: Massino Persic \& Paolo Salucci, SISSA, via Beirut 4,
I 34013 Trieste, Italy.
I 34013 Trieste, Italy.
Tel: 39 40 378 7520
Tel: 39 40 378 7520
Fax: }\quad3940\quad378752
Fax: }\quad3940\quad378752
E-mail: dm1996@tsmi19.sissa.it
E-mail: dm1996@tsmi19.sissa.it
HST AND THE HIGH REDSHIFT UNIVERSE, 37th Herstmonceux Conference
HST AND THE HIGH REDSHIFT UNIVERSE, 37th Herstmonceux Conference
July 1 - 5, 1996, Cambridge, UK.
July 1 - 5, 1996, Cambridge, UK.
Contact address: Gill Harrison, Royal Greenwich Observatory, Madingley
Contact address: Gill Harrison, Royal Greenwich Observatory, Madingley
Road, Cambridge CB3 OEZ, England.
Road, Cambridge CB3 OEZ, England.
Tel: 44 223 374 000
Tel: 44 223 374 000
Fax: 44 223 374 700
Fax: 44 223 374 700
E-mail: g.harrison@ast.cam.ac.uk
E-mail: g.harrison@ast.cam.ac.uk
WOLF-RAYET STARS IN THE FRAMEWORK OF STELLAR EVOLUTION

```
WOLF-RAYET STARS IN THE FRAMEWORK OF STELLAR EVOLUTION
```

```
33rd Liege International Astrophycical Colloquium
July 1 - 3, 1996
Contact address: Institute d'Astrophysique, Avenue de Cointe, 5,
B-4000 Liege, Belgium
Fax: (32-41) 527474
E-mail: ASTROCOL@VM1.ULG.AC.BE
International Conference on THE SL9-JUPITER COLLISION
July 3 - 5, 1996, Meudon, France.
Contact address: Agnes Fave, Conference SL9-Jupiter, DESPA,
Observatoire de Paris, F }92195\mathrm{ Meudon Cedex, France
Fax: 33 1 45 07 2806
E-mail: sl9jupiter@megasx.obspm.fr
VIth International Conference on ASTEROIDS, COMETS, METEORS
July 8 - 12, 1996, Versailles, France.
Contact address: A.-C. Levasseur-Regourd, ACM, Aeronomie CNRS, BP 3,
F 91371 Verrieres-le-Buisson, France.
Tel: 33 1 64 47 4293
Fax: 33 1 69 20 2999
E-mail: aclr@aerov.jussieu.fr
```

```
VARIABLE STARS AND THE ASTROPHYSICAL RETURNS OF MICROLENSING
SURVEYS
July 8 - 12, 1996, Paris, France.
Contact address: C. Douillet, Institut d'Astrophysique, 98bis, bvd Arago,
F }75014\mathrm{ Paris, France.
Tel: 33 1 44 32 8000
Fax: 33 1 44 32 8001
E-mail: iapcoll@iap.fr
13th IPS Conference: NEW POTENTIAL FOR THE PLANETARIUMS
July 12 - 16, 1996, Osaka, Japan.
Contact address: Secretariat of IPS'96, c/o Inter Group Corporation, 3-7-3
Nakatsu, Kita-ku, Osaka 531, Japan.
Tel: 81 6 372 9345
Fax: 81 6 372 6127
VISUAL DOUBLE STARS: FORMATION, DYNAMICS AND EVOLUTIONARY
TRACKS
International Workshop on Multiple Stars & Celestial Mechanics in
Commemoration of the 5th Centenary of the University of Santiago de
Compostela, Spain
July 29 - August 1, 1996, Santiago de Compostela, Spain.
Contact address: J.A. Docobo, Astronomical Observatory "Ramon Maria
Aller", University of Santiago de Compostela, P.O. Box 197, S 15706
Santiago de Compostela, Spain.
Tel: 34 81 59 2747
Fax: 34 81 59 7054
E-mail: oadstars@usc.es
Fifth Oxford Conference on ARCHAEOSTARONOMY
August 3 - 9, 1996, Santa Fe, New Mexico, USA.
Contact address: Rolf M. Sinclair, National Science Foundation, Physics
Division, 4201 Wilson Blvd. W., Arlington, VA 22230, USA.
Tel: 1 202 357 7996
Fax: 1 202 357 7994
E-mail: rsinclai@nsf.gov
```

GALACTIC AND CLUSTER COOLING FLOWS
August 5-8, 1996, Haifa, Israel.
Contact address: N. Soker, Dept. of Mathematics \& Physics, Oranim -

```
University Division, IL 36006 Tivon, Israel.
Tel: 972 4 830 504
Fax: 972 4 832 277
E-mail: soker@phys1.technion.ac.il
XXVth General Assembly of THE INTERNATIONAL UNION OF RADIO SCIENCE
(URSI)
August 28 - September 5, 1996, Lille, France.
Contact address: AG URSI Secretariat Pr. P. Degauque, Universite de
Lille 1, F 59655 Villeneuve d'Ascq Cedex, France.
Tel: 33 20 33 7206
Fax: 33 20 33 7207
E-mail: agursi@univ-lillel.fr
BLAZARS, BLACK HOLES AND JETS
September 9 - 13, 1996, Girona, Spain.
Contact address: M. Kidger, Instituto de Astrofisica de Canarias, Via
Lactea, E 38200 La Laguna, Tenerife, Spain.
Tel: 34 22 60 5200
Fax: 34 22 60 5210
E-mail: mrk@iac.es
2nd Integral Workshop on THE TRANSPARENT UNIVERSE
September 16 - 20, 1996, St. Malo, France.
Contact addresses: Dr. Christoph Winkler, Astrophysics Division,
ESA/ESTEC, P.O. Box 299, NL 2200 AG Noordwijk, The Netherlands.
Tel: 31 71 65 3591
Fax: 31 71 65 4690
WWW: http://astro.estec.esa.nl/SA-general/Projects/Integral/integral.html
Third Conference on FAINT BLUE STARS
October 14 - 17, 1996, Schenectady, NY, USA.
Contact address: A.G. Davis Philip, 1125 Oxford Place, Schenectady,
NY 12308, USA.
Tel: 1 518 374 5636
Fax: 1 518 346 5781
E-mail: agdp@gar.union.edu
```

```
A HALF CENTURY OF STELLAR PULSATIONS
June 16 - 20, 1997, Los Alamos, New Mexico, USA.
Contact address: Joyce A. Guzik, Los Alamos National Laboratory, X-2
MS B220, Los Alamos, NM 87545-2345, USA.
Tel: 1 505667 8927
Fax: 1 505 665 4080
E-mail: joy@lanl.gov
ASYMPTOTIC GIANT STARS
August 26 - 31, 1998, Montpellier, France.
Contact address: C. Waelkens, Instituut voor Sterrenkunde, Celestijnenlaan
200B, B 3001 Leuven, Belgium.
Tel: 32 16 20 0656
Fax: 32 16 20 1241
E-mail: fgafa01@cc1.kuleuven.ac.be
```


## 7. INTERNATIONAL ORGANISATIONS:

ICSU/UNESCO CONFERENCE ON ELECTRONIC PUBLISHING

On February 19 - 23, 1996 ICSU and UNESCO will jointly organise a conference on "Electronic Publishing in Science". Attendance to this conference is restricted to representatives of scientific organisations. Following the proposal of

Commission 5, the IAU representatives will be Profs. A. Hearn and J. Lequeux.

## 8. IAU PUBLICATIONS

Special offer from Kluwer Academic Publishers to IAU Members on IAU publications: Members of the IAU receive a discount of $331 / 3 \%$ off the price of the hardbound Symposia and Highlights volumes. They may purchase paperback copies of Symposium proceedings at NLG 60.00 per copy and paperback copies of the Highlights at NLG 90.00 per copy. The Transactions may be purchased at NLG 100.00 per copy.
8.1. HIGHLIGHTS OF ASTRONOMY, VOL. 10

Ed. I. Appenzeller
Hardbound USD 310.00 GBP 194.00 0-7923-3553-8
8.2. TRANSACTION XXII B

Ed. I. Appenzeller
Hardbound USD 287.00 GBP 180.00 0-7923-3842-1
8.3. IAU MEMBERSHIP LIST

Paperback USD 64.40 GBP 64.40 0-7923-3878-2
8.4. SYMPOSIA (KLUWER ACADEMIC PUBLISHERS)

164 STELLAR POPULATIONS
Eds. P.C. VAN DER KRUIT\& G. GILMORE
Hardbound USD 176.00 GBP 110.50 0-7923-3537-6
166 ASTRONOMICAL AND ASTROPHYSICAL OBJECTIVES OF SUB-MILLIARCSECOND OPTICAL ASTROMETRY
Eds. Erik Hoeg \& P. Kenneth Seidelmann
Hardbound USD 192.00 GBP 124.00 0-7923-3442-6
Paperback USD 78.00 GBP 51.00 0-7923-3443-4
167 NEW DEVELOPMENTS IN ARRAY TECHNOLOGY AND APPLICATIONS
Eds. A.G. Davis Philip, Kenneth A. Janes \& Arthur R. Upgren
Hardbound USD 168.00 GBP 104.00 0-7923-3639-9
Paperback USD 95.59 GBP 59.00 0-7923-3640-2
8.5. COLLOQUIA

Cambridge University Press
139 NEW PERSPECTIVES ON STELLAR PULSATION AND PULSATING
VARIABLE STARS
Eds. J.M. Nemec \& J.M. Matthews
Hardbound GBP 40.00 0-521-44382-2

Springer Verlag
151 FLARES AND FLASHES
Eds. J. Greiner, H.W. Duerbeck \& R.E. Gershberg
Hardbound 3-540-60057-4

## 9. MEMBERSHIP

We would like to remind all colleagues that addresses of individual IAU Members can be obtained from the IAU World Wide Web server URL address (see back cover of this IB).

```
10. OTHER MATTERS:
    INTERNATIONAL EARTH ROTATION SERVICE (IERS)
    UTC TIME STEP on the 1st of January 1996
```

A positive leap second will be introduced at the end of December 1995. The
sequence of dates of the UTC second markers will be:

| 1995 | December 31, |
| :--- | :--- |
| 1995 | December 31, |
| 1996 | January $1,0 \mathrm{~h} 9 \mathrm{~m} 59 \mathrm{~s}$ |
| 23h 59 m 60 s |  |

The difference between UTC and the International Atomic Time TAI is:
from 1994 July 1, Oh UTC, to 1996 January 1, Oh UTC: UTC-TAI = - 29 s
from 1996 January 1, Oh UTC, until further notice: UTC-TAI = - 30 s

Page last modified by the IAU Secretariat on 2001-01-26.

