

TRANSACTIONS OF THE
INTERNATIONAL ASTRONOMICAL UNION
VOL. XXB

**PROCEEDINGS
OF THE TWENTIETH
GENERAL ASSEMBLY**

BALTIMORE 1988

KLUWER ACADEMIC PUBLISHERS



INTERNATIONAL ASTRONOMICAL UNION
UNION ASTRONOMIQUE INTERNATIONALE

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PROCEEDINGS OF THE TWENTIETH
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General Secretary of the Union

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PRÉSIDENT DE L'UNION ASTRONOMIQUE INTERNATIONALE

JORGE SAHADE

PRESIDENT OF THE INTERNATIONAL ASTRONOMICAL UNION

1985–1988

Abbreviations

BIPM	Bureau International des Poids et Mesures
CCDS	Consultative Committee for the Definition of the Second
CCIR	International Radio Consultative Committee
CODATA	Committee on Data for Science & Technology
COSPAR	Committee on Space Research
COSTED	Committee on Science & Technology in Developing Countries
CTS	Committee on the Teaching of Science
EPS	European Physical Society
ESA	European Space Agency
ESO	European Southern Observatory
FAGS	Federation of Astronomical & Geophysical Services
IAF	International Astronautical Federation
IAG	International Association of Geodesy
ICSU	International Council of Scientific Unions
IERS	International Earth Rotation Service
IRAS	Infrared Astronomy Satellite
IUCAF	Inter-Union Commission on Frequency Allocations for Radio Astronomy & Space Science
IUGG	International Union of Geodesy and Geophysics
IUPAP	International Union of Pure & Applied Physics
IUWDS	International Ursigram & World Day Service
NASA	National Aeronautics & Space Administration
NSF	National Science Foundation
OECD	Organisation of Economic Cooperation & Development
RAS	Radio Astronomy Service
RDSS	Radio-Determination Satellite Service
SCOPE	Scientific Committee on Problems of the Environment
SCOSTEP	Scientific Committee on Solar-Terrestrial Physics
UNESCO	United Nations Educational, Scientific & Cultural Organization
URSI	Union Radio Scientifique Internationale
WARC	World Administrative Radio Conference

Preface

The XXth General Assembly of the International Astronomical Union was held in Baltimore, Maryland USA from August 02 to 11, 1988. The Inaugural Ceremony on August 02 was held in the presence of representatives of the United States Government, the State of Maryland, the City of Baltimore and the host institution -the Johns Hopkins University- as well as of the National and Local Organising Committees.

The scientific programme maintained the high standards of the Union and the scientific proceedings may be found either in this volume or in volume 8 of Highlights of Astronomy. The scientific programme was organised by the 40 Commission Presidents and coordinated by the General Secretary (1985-1988), Dr. J.-P. Swings. The local arrangements were effectively made through the National Organising Committee under the Chairmanship of Prof. F. Drake and the Local Organising Committee under the co-Chairmanship of Prof. A. Davidsen and Dr. R. Giacconi. The smooth day to day operation of the meeting resulted from the incomparable dedication of Karen Weinstock and Harold Screen.

This volume summarises the work of the XXth General Assembly. Chapter I contains the discourses at the Inaugural Ceremony and the music for the specially composed Fanfare for Brass Ensemble. Chapter II contains the proceedings of the Extraordinary General Assembly of August 02, 1988. Chapter III contains the proceedings of both sessions of the General Assembly, the report of the Finance Committee and the Accounts, the Resolutions adopted and other matters of Union's business. Chapter IV is the Report of the Executive Committee 1985-1988. Chapters II, III and IV record the business of the Union. Chapter V records the business and scientific sessions of the Commissions during the General Assembly. Chapters VI, VII and VIII contain the Statutes, By-Laws and Working Rules of the Union, the membership list (individual, geographical and by Commission) and the IAU Style book respectively. In order to make the sections of this volume of the Transactions more easily accessible, the Functions and Statutes of the Union, Chapter VI, have been printed on pink paper and the Membership details, Chapter VII, on green paper. A list of commonly used abbreviations in this volume appears immediately after the list of contents.

In the preparation of the volume I am deeply grateful to my predecessor, J.-P. Swings for his unstinted help, advice and translation of the Statute revisions into French; to Roger Cayrel for his work in translating the Resolutions into French; to George Wilkins for undertaking and bringing to fruition the preparation of the current IAU Style Book -and to the editors of the principal astronomical journals for their valuable suggestions; in particular to Monique Orine for her work in preparing the text of this volume and to both Monique Orine and Huguette Gigan of the Paris Secretariat for the preparation of the final camera ready copy during a period of considerable difficulty occasioned by a postal strike and the move of the Secretariat.

IAU Secretariat
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France

Derek McNally
General Secretary
April 24, 1989

CONTENTS

Preface		xiii
Abbreviations		xv
 CHAPTER I	 INAUGURAL CEREMONY	 1
	Address by Dr. A. Davidsen, co-Chairman of the Local Organizing Committee	7
	Address by Dr. R. Giacconi, co-Chairman of the Local Organizing Committee	7
	Address by Dr. F. Drake, Chairman of the National Organizing Committee	8
	Address by Dr. S. Muller, President of the Johns Hopkins University	9
	Address by K.L. Schmoke, Mayor of the City of Baltimore	10
	Address by M.A. Steinberg, Lieutenant Governor of the State of Maryland	10
	Address by Dr. F. Drake, on behalf of Dr. B. Shakhshiri, Assistant Director for Science & Engineering Education, National Science Foundation	12
	Address by Dr. N.W. Hinners, Associate Deputy Administrator, NASA Headquarters	13
	Address by Dr. W. R. Graham, Science Advisor to the President & Director of the Office of Science & Technology Policy	14
	Address by Prof. J. Sahade, President of the International Astronomical Union	16
 CHAPTER II	 EXTRAORDINARY GENERAL ASSEMBLY	 19
	1. Extension of the membership of the Executive Committee by a President-Elect	19
	2. Establishment of a new category of adherence to the Union, Associate National Member	19
 CHAPTER III	 TWENTIETH GENERAL ASSEMBLY	 21
	Session 1: 2 August, 1988	21
	1. Formal opening by the President	23
	2. Appointment of Official Interpreters	26
	3. Report of the Executive Committee, 1985-1987	26
	4. Report of the General Secretary January-August 1988	26
	. nominations for IAU Membership	26
	. report by the General Secretary	27
	5. Report by the President on the work of the Special Nominating Committee 1985-1988	28

6. Announcement of	
. the names of Official Representatives of Adhering Organizations	29
. the names of Representatives to serve on the Nominating Committee	29
. the names of Acting Presidents of Commissions	31
7. Appointment of the Finance Committee	31
8. Appointment of the Resolutions Committee	33
9. Revisions of the Statutes & By-Laws	33
10. Resolutions submitted by Adhering Bodies	33
11. Resolutions submitted by Commissions or by associated Inter-Union Commissions	33
 Session 2: 11 August, 1988	 35
12. Financial matters	37
. report of the Finance Committee	37
. votes on proposed budgets for 1988 & 1989-1991	39
13. Financial Resolutions of the Executive Committee	39
14. Resolutions submitted by the Executive Committee	39
. Amateur-Professional Cooperation in Astronomy Coopération entre les astronomes amateurs & professionnels en astronomie	40
. Adverse Environmental Impacts on Astronomy Impacts sur l'environnement nuisibles pour l'Astronomie	40
. Improvement of Publications Amélioration des Publications	42
. International Space Year 1992 Année Internationale de l'Espace 1992	44
. Cooperation to Save Hydroxyl Bands Coopération pour la sauvegarde des bandes de OH	45
. Sharing Hydroxyl Band with Land Mobile Satellite Services Partage de la bande Hydroxyle avec les services mobiles au sol	46
. Revision of Frequency Bands for Astrophysically Significant Lines Révision des bandes de fréquences pour les raies d'intérêt astrophysique	47
15. Resolutions submitted by the Resolutions Committee	48
. Extensions to FITS Extensions à FITS	51
. Working Group on FITS Groupe de travail sur FITS	52
. Endorsement of Commission Resolutions Soutien des Résolutions des Commissions	52
16. Resolutions submitted by Commissions	53
. WGRF Resolutions Résolutions du Groupe de travail sur les repères de références (GWFR)	53
. WGRS -A Continuing Intercommission Project Reconduction du WGRS	54
. Flare 22 Programme Programme d'étude des éruptions du cycle 22	55
. Continuous Survey of Solar Phenomena Surveillance continue des phénomènes solaires	56
. Databases on Minor Planets Bases de données sur les petites planètes	57
	58

. Extension of Global Position Catalogues	58
Extension des Catalogues Globaux de Positions	58
. Availability of the Global Positioning System (GPS)	59
Disponibilité du GPS	59
. Need for Accurate Time	59
Besoin d'un temps exact	60
. IAU Contribution to FAGS	60
Contribution de l'UAI à FAGS	61
. Needed History on BIH & IPMS	61
Besoin de l'histoire du BIH & de l'IPMS	61
17. Appointment of the Special Nominating Committee	62
18. Nominations of the new Members of the Union	62
19. Applications for IAU Membership	62
. Application from Algeria	62
. Application from Iceland	63
. Application from Malaysia	64
. Application from Morocco	65
. Application from Peru	65
. Application from Saudi Arabia	66
20. Changes in Commissions	67
. Commission Presidents & Vice-Presidents	67
. Organizing Committees of Commissions	69
21. IAU Representatives to other Organisations	69
22. Place & date of the XXith General Assembly	70
23. Election to the Union of a President, a President-Elect, six Vice-Presidents, a General Secretary & an Assistant General Secretary	70
24. Address by the President 1985-1988	72
25. Address by the President 1988-1991	73
26. Closing Ceremonies	74

CHAPTER IV	REPORT OF THE EXECUTIVE COMMITTEE	79
	Executive Committee 1985-1988	79
1.	Introduction	81
2.	Administration	81
.	Executive Committee meetings	81
.	Officers' Meetings	81
.	IAU Secretariat	81
.	IAU Staff	81
.	Adhering Countries	82
.	Members of the IAU	82
.	Consultants to IAU Commissions	82
3.	Commissions of the IAU	82
4.	Scientific Meetings	83
.	Symposia	83
.	Colloquia	84
.	Co-sponsored Meetings	85
.	Regional Meetings	87
.	IAU/UNESCO Young Astronomers' Schools	87
.	XIXth General Assembly, New Delhi, India, 1985	88
5.	Publications	88
.	Publisher	88
.	Sales	88
.	Information Bulletin	88
6.	Relations to other organisations	89

7.	Financial matters	90
	. Summarised accounts	90
	. Comments on summarised accounts	91
	. Balance 1985-1987	92
	. Residual budget 1988	92
	. Adopted budget for 1989-1994	94
8.	List of Adhering Organisations	97
9.	List of deceased Members	97
10.	List of IAU Publications	97
	. Transactions & Highlights	97
	. IAU Symposia volumes	97
	. IAU Colloquia volumes	98
	. Proceedings of Regional Astronomy Meetings	100
	. Miscellaneous Publications	100
	. Commissions' Publications	100
CHAPTER V	REPORT OF MEETINGS OF COMMISSIONS	103
	N ^o Commission	
4	Ephemerides (Ephémérides)	105
5	Documentation & Astronomical Data (Documentation & données astronomiques)	109
6	Astronomical Telegrams (Télégrammes astronomiques)	119
7	Celestial Mechanics (Mécanique céleste)	121
8	Positional Astronomy (Astronomie de position)	125
9	Instruments & Techniques	135
10	Solar Activity (Activité solaire)	151
12	Radiation & Structure of the Solar Atmosphere (Radiation & structure de l'atmosphère solaire)	151
14	Atomic & Molecular Data (Données atomiques & moléculaires)	163
15	Physical Study of Comets, Minor Planets & Meteorites (Etude physique des comètes, des petites planètes & des météorites)	175
16	Physical Study of Planets & Satellites (Etude physique des planètes & des satellites)	185
19	Rotation of the Earth (Rotation de la Terre)	189
20	Positions & Motions of Minor Planets, Comets & Satellites (Positions & mouvements des petites planètes, des comètes & des satellites)	201
21	Light of the Night Sky (Lumière du ciel nocturne)	211
22	Meteors & Interplanetary Dust (Météores & poussière interplanétaire)	
24	Photographic Astrometry (Astrométrie photographique)	219
25	Stellar Photometry & Polarimetry (Photométrie & polarimétrie stellaire)	223
26	Double & Multiple Stars (Etoiles doubles & multiples)	237

27	Variable Stars (Etoiles variables)	243
28	Galaxies	247
29	Stellar Spectra (Spectres stellaires)	259
30	Radial Velocities (Vitesses radiales)	266
31	Time (L'heure)	275
33	Structure & Dynamics of the Galactic System (Structure & dynamique du système galactique)	
34	Interstellar Matter (Matière interstellaire)	279
35	Stellar Constitution (Constitution des étoiles)	283
36	Theory of Stellar Atmospheres (Théorie des atmosphères stellaires)	289
37	Star Clusters & Associations (Amas stellaires & associations)	291
38	Exchange of Astronomers (Echange d'astronomes)	299
40	Radio Astronomy Radioastronomie	301
41	History of Astronomy (Histoire de l'astronomie)	313
42	Close Binary Stars (Etoiles doubles serrées)	315
44	Astronomy from Space (L'astronomie à partir de l'espace)	319
45	Stellar Classification (Classification stellaire)	323
46	Teaching of Astronomy (Enseignement de l'Astronomie)	333
47	Cosmology (Cosmologie)	341
48	High Energy Astrophysics (Astrophysique des hautes énergies)	349
49	The Interplanetary Plasma & the Heliosphere (Plasma interplanétaire & héliosphère)	363
50	Protection of Existing & Potential Observatory Sites (Protection des sites d'observatoires existants & potentiels)	365
51	Bioastronomy: Search for Extraterrestrial Life (Bioastronomie : recherche de la vie dans l'Univers)	367
	Working Group for Planetary System Nomenclature (Groupe de Travail sur la nomenclature du système planétaire)	369

CHAPTER VI FUNCTIONS AND STATUTES OF THE UNION

Pink/FS1

1.	Useful addresses	FS3
2.	History of the Union	FS3
3.	IAU Representation to other Organisations	FS3
4.	Services of the Union	FS3
5.	Rules for Scientific Meetings	FS5
6.	Statutes, By-Laws & Workings Rules	FS17
	Statuts, règlements & directives	FS28

CHAPTER VII	MEMBERSHIP	Green/M1
	1. List of Adhering Countries	M3
	2. Membership of Commissions	M9
	3. Geographical Repartition of Members	
	. within Adhering Countries	M95
	. within Non Adhering Countries	M149
	4. Alphabetical List of Members	M151
CHAPTER VIII	IAU STYLE BOOK	Si-S50

CHAPTER I

INAUGURAL CEREMONY

2 August 1988

The Inaugural Ceremony was held at the Convention Center, Baltimore, in the presence of distinguished representatives from the Government of the United States, the State of Maryland, the City of Baltimore, the Johns Hopkins University, the National Aeronautics & Space Administration, the and the US National Committee for the IAU.

The chair was taken by Dr. A. Davidsen, co-Chairman of the Local Organizing Committee, from the Johns Hopkins University.

A rousing aubade, specially composed for the occasion by Elam Ray Sprenkle, was beautifully performed by the Annapolis Brass Quintet under the direction of David Cren.

An Aubade for Brass Quartet,
 composed by Elam Ray Sprenkle,
 Commissioned for the XXth General Assembly

An Aubade

for Brass Quartet

Commissioned for the Astro-Physics Convention

Baltimore, Md., Summer, 1988

E. Sprenkle

Handwritten musical score for 'Archives' by D. 60. The score is written on multiple staves, with musical notation including notes, rests, and dynamic markings such as 'p' (piano) and 'mp' (mezzo-piano). The notation is dense and includes various musical symbols like slurs, ties, and accidentals. The score is organized into measures, with some measures containing multiple notes or rests. The overall style is that of a handwritten manuscript, with clear notation and some annotations.

The image displays a handwritten musical score for a piece titled "INAUGURAL CEREMONY". The score is spread across two systems, each containing five staves. The notation is dense and includes various musical symbols such as notes, rests, beams, and dynamic markings like "p" (piano) and "f" (forte). The right system includes the word "Allegretto" at the bottom right, and the left system includes the word "Tempo" at the bottom left. The score is written in a clear, legible hand, and the overall layout is organized and professional.