

TRANSACTIONS OF THE
INTERNATIONAL ASTRONOMICAL UNION
VOL. XVIII B

**PROCEEDINGS
OF THE EIGHTEENTH
GENERAL ASSEMBLY**

PATRAS 1982



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INTERNATIONAL ASTRONOMICAL UNION
UNION ASTRONOMIQUE INTERNATIONALE

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OF THE
INTERNATIONAL ASTRONOMICAL UNION
VOLUME XVIII B

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GENERAL ASSEMBLY

PATRAS 1982

Edited by

RICHARD M. WEST
General Secretary of the Union



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Preface

The XVIIIth General Assembly of the International Astronomical Union was held in Patras, Greece, from 17-26 August 1982. It was marked by the tragic death of the President of the IAU, Professor M.K.V. Bappu, on August 19, 1982. This sad event, without precedent in the history of the Union, posed serious problems to the organization of the General Assembly, which could only be overcome by the full collaboration of all members, the organizers, and the Executive Committee.

A tribute to the memory of Prof. Bappu was paid during a plenary meeting on 23 August 1982. The full texts of the speeches are published in Chapter I of this volume.

The excellent scientific programme in Patras was organized by the Presidents of the 40 IAU Commissions and coordinated by the IAU General Secretary (1979-1982), Professor P.A. Wayman. The local arrangements were taken care of by Professor C. Goudas and his collaborators from the Patras University. Due to the unexpected withdrawal in 1979 of another invitation to host the 1982 IAU General Assembly, the organizers in Greece had less than two years available for the extensive preparations, and our hearty thanks are due to them for their persistent efforts, which made this General Assembly an outstanding success.

Although the usefulness of IAU General Assemblies, as compared to more specialized meetings, has been questioned at various times, there is little doubt that the XVIIIth General Assembly was a clear demonstration of their value. First of all, it became a most fertile meeting ground for scientists from all over the world, providing a highly efficient forum for evaluation of on-going international collaborative projects and also for the initiation of new ones. Secondly, and not of less importance, it was for many young astronomers the first massive contact with more experienced colleagues from other countries and a unique opportunity to make the acquaintance with authors of scientific papers whom they had only known by name before. For them, as well as for many astronomers working in countries where our science has not yet been firmly established, the meetings in Greece were highly incentive and acted as catalysts for future research projects.

The present volume, IAU Transactions XVIII B, summarizes the work of the 18th General Assembly. The Inaugural Ceremony and the first session of the General Assembly were held in the evening of 17 August 1982, in the Ancient Odeon of the City of Patras under the open sky. The inaugural speeches are published in Chapter II. The proceedings of the General Assembly will be found in Chapter III, which includes the Resolutions and other aspects of the administration of the Union. They provide the official record of the business of the General Assembly, and, together with the Executive Committee Report (Chapter V), the permanent record for the Union in the period 1979-1982.

In addition, this volume contains the Commission Reports from Patras, compiled by the Presidents of Commissions (Chapter IV). Pending re-edition of the complete Astronomer's Handbook, which is foreseen within the next few years, Chapter VI gives updated information about the various activities of the Union. Finally, Chapter VII contains the members lists for IAU Commissions and also an alphabetical list of the more than 5000 individual members of the IAU.

In order to make the information contained in this volume available at the earliest possible date, a tight production schedule was imposed. This would not have been possible without the efficient cooperation of the Presidents of Commissions who provided the camera-ready manuscripts for Chapter IV. Similarly, I am most grateful to Mrs. B. Manning and Ms. P. Smiley (IAU Secretariat, Paris), and Mrs. E. Völk (ESO, Munich) for their expert help in typing and assembling the manuscript for publication. I am also much indebted to my predecessor, Professor P.A. Wayman and Dr I. Elliott of the Dunsink Observatory, Dublin, Ireland, who kindly provided the computer print-outs with the lists of Commission members. Finally, it is a pleasure to acknowledge the friendly, professional support by the IAU Publisher, D. Reidel Publishing Co., and in particular Mrs. N.M. Pols-v.d. Heijden.

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Richard M. West
General Secretary, IAU
4 December 1982

Contents

PREFACE	v
I. <u>TRIBUTE to the Memory of PROFESSOR M.K.V. BAPPU (1927 - 1982)</u>	1
II. <u>INAUGURAL CEREMONY 17 August 1982</u>	7
- Allocution de Mr John Xanthakis, Président du Comité National d'Organisation	7
- Allocution de Mr Constantine Karamanlis, Président de la République Hellénique (prononcée par Mr Constantin Goudas, Professeur à l'Université de Patras)	8
- Allocution de Mr George Maniatis, Recteur de l'Université de Patras	9
- Allocution de Mr M.K.V. Bappu, Président de l'UAI (prononcée par Mr E.K. Kharadze, Vice-Président de l'UAI)	9
- Allocution de Mr Periclès Théocaris, Président de l'Académie d'Athènes	10
III. <u>REPORT ON XVIIIth General Assembly, 17 and 26 August 1982</u>	15
Agenda	15
<u>First Session (17 August 1982)</u>	
Presidential Address	19
Representatives of other Organisations	21
Members deceased since last General Assembly	22
Report of the Executive Committee (1979-82)	23
Report of the General Secretary	23
<u>Resolution A1: Ratification of Change in Adhering Bodies for China</u>	25
Report of Special Nominating Committee (1979-82)	26
Official Representatives of Adhering Organisations and Representatives on Nominating Committee	27
Appointment of Finance Committee	28

Appointment of Resolutions Committee	29
Resolutions submitted by Commissions or by Associated Inter-Union Commissions	29

Second Session (26 August 1982)

Report of the Finance Committee	30
Unit of Contribution	32
Budget 1983-85	33
<u>Resolutions</u> adopted by the General Assembly	35
A2 - Support of Meteor Data Center	35
A3 - Contract Scheme for Visiting Lecturers	35
A4 - Creation of Commission 51: "Search for Extraterrestrial Life"	36
A5 - Change of Names of Commissions 26 and 34	37
R1 - Comet Halley Days	37
R2 - International Halley Watch (IHW)	38
R3 - 1980 Theory of Nutation	38
R4 - Synoptic Solar Observations	39
R5 - MERIT Campaign	39
R6 - AAVSO Data of Cataclysmic Variables	42
R7 - Astronomy and Astrophysics Abstracts	42
R8 - Very Long Baseline Interferometry	43
R9 - Protection of Radio Frequency Bands	43
R10 - Sydney Observatory Instruments	44
R11 - Endorsement of Commission Resolutions	45
Commission Resolutions C1-C16	45
Appointment of Special Nominating Committee	56
New Members of the Union	56
Appointment of Commission Presidents and Vice-Presidents	56
Place and Date of XIXth IAU General Assembly	58
Election of New Executive Committee	59
Address by the Newly Elected President	59
Closing Ceremonies	60

IV. REPORTS of MEETINGS of COMMISSIONS

<u>COMPTES RENDUS des SEANCES des COMMISSIONS</u>	65
<i>No.</i>	<i>Commission</i>
4 Ephémérides	Ephemerides 67
5 Documentation et Données Astronomiques	Documentation and Astronomical Data 73

<i>No.</i>	<i>Commission</i>	
6	Télégrammes Astronomiques	Astronomical Telegrams 79
7	Mécanique Céleste	Celestial Mechanics 81
8	Astronomie de Position	Positional Astronomy 85
9	Instruments et Techniques	Instruments and Techniques 95
10	Activité Solaire	Solar Activity 113
12	Radiation et Structure de l'Atmosphère Solaire	Radiation and Structure of the Solar Atmosphere 115
14	Données Atomiques et Moléculaires	Atomic and Molecular Data 119
15	L'Etude Physique des Comètes, des Petites Planètes et des Météorites	Physical Study of Comets, Minor Planets and Meteorites 141
16	Etude Physique des Planètes et des Satellites	Physical Study of Planets and Satellites 147
19	Rotation de la Terre	Rotation of the Earth 163
20	Positions et Mouvements des Petites Planètes, des Comètes et des Satellites	Positions and Motions of Minor Planets, Comets and Satellites 175
21	Lumière du Ciel Nocturne	Light of the Night Sky 187
22	Météores et Poussière Interplanétaire	Meteors and Interplanetary Dust 193
24	Astrométrie Photographique	Photographic Astrometry 197
25	Photométrie et Polarimétrie Stellaires	Stellar Photometry and Polarimetry 207
26	Etoiles Doubles et Multiples	Double and Multiple Stars 211
27	Etoiles Variables	Variable Stars 215
28	Galaxies	Galaxies 217
29	Spectres Stellaires	Stellar Spectra 227
30	Vitesses Radiales	Radial Velocities 231
31	L'Heure	Time 235
33	Structure et Dynamique du Système Galactique	Structure and Dynamics of the Galactic System 245
34	Matière Interstellaire	Interstellar Matter 249
35	Constitution des Etoiles	Stellar Constitution 257
36	La Théorie des Atmosphères Stellaires	The Theory of Stellar Atmospheres 261
37	Amas Stellaires et Associations	Star Clusters and Associations 263
38	Echange des Astronomes	Exchange of Astronomers 269
40	Radioastronomie	Radio Astronomy 273
41	Histoire de l'Astronomie	History of Astronomy 279
42	Etoiles Binaires Serrées	Close Binary Stars 281
44	L'Astronomie à partir de l'Espace	Astronomy from Space 291
45	Classification Stellaire	Stellar Classification 297

<i>No.</i>	<i>Commission</i>	
46	Enseignement de l'Astronomie	Teaching of Astronomy 303
47	Cosmologie	Cosmology 311
48	Astrophysique de Grande Energie	High Energy Astrophysics 315
49	Plasma Interplanétaire et Heliosphère	The Interplanetary Plasma and the Heliosphere 317
50	Protection des Sites d'Observatoires Existants et Potentiels	Identification and Protection of Existing and Potential Observatory Sites 319
51	Recherche de la Vie dans l'Univers	Search for Extraterrestrial Life 323
	Nomenclature du Système Planétaire	WORKING GROUP for Planetary System Nomenclature 331
V. <u>REPORT of the EXECUTIVE COMMITTEE (1979-81)</u>		347
VI. <u>ASTRONOMERS HANDBOOK</u>		383
1.	Short History of the International Astronomical Union	384
2.	Administration and Finances of the Union	384
3.	The International Scientific Unions	385
4.	Services and Functions of the IAU	387
5.	Publications of the International Astronomical Union	394
6.	Meetings of the International Astronomical Union	394
7.	Executive Committee 1982 - 1985	394
8.	Statutes, By-laws	397
9.	Working Rules	413
10.	Rules for Scientific Meetings	423
11.	List of Countries Adhering to the Union	423
VII. <u>MEMBERSHIP</u>		
1.	Membership of Commissions	429
2.	Alphabetical List of Members	458

I.

Tribute to the Memory of Professor M. K. V. Bappu

Professor M.K.V. Bappu, President of the International Astronomical Union (1979-1982) died in hospital in Munich, Federal Republic of Germany, at the time of the XVIIIth General Assembly. He had undergone a major heart operation on 9 August and although the surgical intervention was apparently successful, serious complications set in a few days later. After a heroic struggle, assisted by the foremost medical expertise, Professor Bappu expired in the early evening of Thursday, 19 August 1982. Word about this tragic event was immediately received in Patras and the IAU Executive Committee in an emergency meeting the same evening decided that a special tribute should be paid to the memory of their esteemed colleague, friend and President. This took the form of a meeting held at the University of Patras, on 23 August 1982 at 13:00 hours, with speeches by representatives of the IAU, of the Indian National Science Academy, of the Greek National Committee for Astronomy, of the Local Organising Committee and of Professor Bappu's wide circle of friends. The meeting brought together the majority of General Assembly participants and was a sad farewell to a highly respected and admired scientist, a brilliant organisator and a beloved friend.

The texts of the speeches, which were also printed in the General Assembly Newspaper, "Astrocsmos", on 24 August, are reproduced below.

PROFESSOR E.K. KHARADZE - ON BEHALF OF THE IAU

Dear Colleagues, Friends, Ladies and Gentlemen,

On behalf of the International Astronomical Union I express the most profound sorrow caused by the most untimely death of the current President of our Union, the distinguished scientist Professor Manali Kallat Vainu Bappu, 55 years of age.

We have all gathered here today at this mournful moment to pay a worthy tribute to his memory.

During Professor Bappu's triennial Presidency of our Union, we have witnessed his devotion to the interests of the Union, his very fruitful activity aimed at its consolidation and strengthening of its scientific effectiveness for the further development of our science - astronomy, all over the planet. The members of our Union will also remember Professor Bappu's contribution at the earlier time of his office in the Union as Vice-President in 1967-1973.

Professor Bappu's prominent activity in the Union and in the world-wide astronomical community in general carries the features not only of the skill of an experienced eminent scientist, but also of personal tact, kindness and benevolence to everybody, that has always been so highly appreciated by his colleagues and that has made collaboration with him so pleasant and easy.

We are all sharing Mrs Bappu's inconsolable grief.

Every effort was made in Munich to save Professor Bappu. The medical care was on the highest possible level. But, unfortunately, it was not Professor Bappu's fate to recover.

With his death, not only we - the Union, suffer a great loss, but so does the entire astronomical world. Moreover, the astronomical community in India is feeling it badly. They have lost their leading astronomer, who was full of plans and ideas concerning further development of astronomy in India.

Last year Professor Bappu visited several observatories in the USSR. We have a vivid memory of that visit, and of the enthusiasm with which he spoke on the development of astronomy in India. Many of his plans are left unfinished. But however profound the sorrow may be, however great the loss, our Indian colleagues should be encouraged to go on with their endeavours. That would be the best tribute paid to Professor Bappu's memory by his compatriots.

Being a member of the USSR delegation to this General Assembly, I permit myself to express on behalf of the USSR astronomers also, most hearty brotherly condolence and sympathy to the Indian delegation.

DR J.C. BHATTACHARYYA - ON BEHALF OF THE INDIAN NATIONAL SCIENCE ACADEMY

I was with a profound shock that we learnt about the sudden, unexpected passing away of Professor M.K. Vainu Bappu at Munich on the 19th of this month. A few days ago, we had the vision of a grand reunion of old friends here; we did not even dream of such a calamity of cruel fate snatching away our beloved, illustrious compatriot at this juncture. It is difficult to believe that Vainu Bappu, our charming friend and leader who was so full of life, will never be among us again.

Bappu completed his fifty-fifth year only a few days ago; we have been looking forward to many more years of his company and guidance. The great upsurge of astronomical activities in India, particularly in the Institute of Astrophysics, which he created, has suddenly lost its main guiding force. It is like a nightmare of a group of sailors in mid-ocean waking up to find their captain missing. He leaves behind not only the team of scientists he has guided and brought up, but also his wife Yemuna and his aged mother to suffer this unbearable loss.

Bappu's contribution to astronomy cannot be summed up easily. He has discovered new objects, new relations, created and guided new schools of astronomers inspired active societies and taken part in a wide range of international activities. He had a deep understanding of many problems; whether it was in instrumentation, or stellar processes or problems concerning tenuous gas clouds, he was able to suggest ways most likely to lead to tangible answers. A gem of a teacher, as anybody who has listened to his lectures would testify, he could attract and hold audiences spellbound. A brilliant organiser who could foresee the minutest details of a projected venture years in advance; in short, Bappu represented a personality of an ideal world, so rare in real life.

We have been fortunate to have this magnificent personality so close to us, and that makes our present loss overwhelming. His circle of friends covered the entire world; many of them are present here, and I am confident that all will agree how his adorable personality charmed everyone who came in contact with him.

One great aspect of Bappu was his love of nature which he worshipped and to which he tendered his creative ideas as offerings; the Institute premises at Bangalore, Kavalur and Kodaikanal bear mute testimony to this enchanting quality.

He implored others to develop a sincere love for nature. Speaking on one occasion he remarked: "To a person who enjoys a glorious sunset or marvels at the beauty of a cobweb glistening with the morning dew, nature unfolds her unending stream of magical charms."

Bappu is no more; he now belongs to eternity. His mortal remains have returned to mother nature he loved so much. Only a few days ago, as I was talking to him by telephone from India, he appeared so full of vitality and confidence. The thought uppermost in his mind was of this Assembly. "Do not worry about me", he advised, "go and join the General Assembly which must be a success. Nothing - nothing should mar the proceedings." That was his wish; we all owe him our sincere efforts to see that it is fulfilled.

ACADEMICIAN J. XANTHAKIS - ON BEHALF OF THE GREEK NATIONAL COMMITTEE FOR ASTRONOMY

Le Comité National d'Organisation exprime ses sincères condoléances pour la mort de notre président, le professeur Bappu.

Avec vive émotion, je me rapelle qu'il y a huit mois, le professeur Bappu nous a rendu visite avec le Secrétaire Général de l'UAI, Monsieur Wayman, pour discuter des affaires concernant la préparation du 18ème congrès.

A cette époque, il était en pleine santé et a manifesté un grand intérêt et beaucoup de dynamisme pour l'organisation de notre congrès.

L'annonce de sa mort subite, nous a laissés dans une profonde consternation et les drapeaux en berne sont le reflet de notre grande peine.

PROFESSOR C.L. GOUDAS - ON BEHALF OF THE LOCAL ORGANISING COMMITTEE
of the XVIIIth General Assembly

Members of the Assembly, Ladies and Gentlemen,

We are gathered here to mourn for the loss of an excellent scientist and a noble man. To mourn for Vainu Bappu, the President of our Union, whose personality and high qualities are known, to a larger or smaller extent, by all.

The death of a President during the General Assembly he was supposed to preside over is an event without precedence and most likely never to be repeated.

As Chairman of the Local Organising Committee of the General Assembly that will be marked and remembered not only for its scientific works but also the loss of Vainu Bappu, I wish, in retrospect, to remind you of the story of Diagoras. Being a veteran of past Olympic games, and while lifted on the shoulders of his two olympic laureate sons inside the stadium of Olympia, Diagoras was cheered by the crowds with the unusual wish "Die now Diagoras". The crowds wished him to die at the moment of the peak of his glory.

Unable as we were, and are, to influence the decisions of fate, we cannot but observe that, since Vainu could not but leave us, the choice of moment for the inevitable was for him a grace - a moment of glory, recognition and appreciation.

Of course, such thoughts can hardly now be mentioned to the immediate family of the deceased. To them we express our deepest condolences.

Long live the memory of Vainu Bappu.

PROFESSOR A. BLAAUW - AS PAST PRESIDENT OF THE IAU

Dear friends and colleagues of Vainu Bappu,

Three years ago, at the closing of the General Assembly at Montreal, when Vainu assumed the presidency, he conveyed to us his feelings of gratitude and joy in anticipation of the task ahead. "As each member," he said, "individual and country, contributes stone by stone to the vast edifice of astronomical knowledge, we rejoice without reservation and in all friendliness at the triumph of the human mind over a facet of Nature. In encouraging opportunities and providing that little extra fillip needed to cross the threshold into the domain of creative productivity, the Union can play an important role."

It is in this spirit that Vainu Bappu, during these past years has served the Union, with his many talents as a scientist and as an organiser. Three years during which he helped guide the affairs of the Union with determination and with the experience and foresight that had already made him so distinguished a renovator of astronomy in his home country. Members of the Executive Committee and of course even more his close collaborators, the Union officers, will long remember his deep concern for all that was in the interest of the IAU.

How immensely would he have enjoyed being among us these two weeks, seeing the accomplishments of tasks undertaken, the realization of plans designed - and above all, how would he have rejoiced in the company of so many dear friends from all over the world, engaged with them in scientific discourse in the subject of astronomy that had fascinated him from his early childhood.

It has not been given to him and to us, for him to be with us during these days. But we know how much he gave his thoughts to this Assembly, long before its official beginnings and with how much care he devoted himself to contributing to its successful proceedings; the several weeks spent in Munich in quiet contemplation of the many affairs to be dealt with and we can only surmise the deep disappointment he must have felt when it became clear that he would be unable to participate himself.

But we have had the privilege of sharing his thoughts of those last weeks by the message he conveyed to us at the opening of this Assembly. May I remind you of the words Vainu passed on to us in his presidential address and let me quote a few sentences from it:

"While innovation in technique is a factor of much significance in the discoveries that will yet be made, it is certain that an even greater role will undoubtedly be of the human intellect. Time and again we have seen how an individual has appeared on the scene and transformed a picture of gathering confusion into one of logical rigour and aesthetic simplicity. In the final reckoning, it is this aspect of Man that is responsible for the culminating triumph. It is, therefore, a responsibility shared by each one of us in our individual roles, be it of teacher or senior colleague, as well as of the astronomical community and the Union as a whole, to nurture such possibility. In its longterm view of contributing to the development of Astronomy, the Union must necessarily give considerable attention to the very important role of the individual in Astronomy."

As we take up our tasks for the Union and for research and teaching, let us keep these words of Vainu Bappu in mind.

DR HARLAN G. SMITH - AS A CLOSE FRIEND

Vainu Bappu was probably my closest friend. For 33 years the strands of our lives have interwoven, even to the extent of his being best man at my wedding, and my just missing (because of academic schedules) being something of an equivalent at his wedding in India. I mention this because so few now in the IAU have had the privilege of really knowing him, and it is my greivous task to say farewell to him as a friend, on behalf of us all.

When the IAU was founded most astronomers knew each other, often rather well. Vainu was proud of the growth of our science, but regretted that he could only know so few of us, especially the young astronomers who are coming up so fast. For those who did not know him, I want to share several memories. There is no way I can truly bring out the richness of Vainu's life and mind and personality, but these vignettes - like flashes of lightning revealing fragments of landscape - may help you to glimpse the wonderful human being behind the formal degrees, the papers, and the honours he so well deserved.

In January 1949 we entered the Harvard Graduate School of Astronomy - entered with trepidation yet excitement to be studying in halls peopled with memories of the likes of Bond and Pickering, and the very real presence of Shapley, Bok, Payne-Gaposchkin, Menzel and Whipple. In the so-called liberal arts there is now a cult - I believe unfortunate and destructive - of the anti-hero, with its emphasis on sickness and psychosis, on feet of clay. But Vainu belonged to an older and finer school. His spirit was generous, kind, non-cynical - even hero-worshipping in the best sense of the word. He deeply admired if not even venerated his teachers and those, living or dead, who had really accomplished something. He well knew and understood human frailties, but to Vainu the important things were those qualities and works of great men and women which should be admired and emulated as far as possible in his own life. Then, as now, it was fashionable for graduate students to work very hard, and we did - sometimes tired and discouraged. I recall an occasion walking home with Vainu late one winter night, our conversation turning to whether we might ever get jobs or amount to anything in astronomy. Nearly always cheerful, he brightened up and proceeded to quote from his memory, well-stocked with classics, the entirety of his favorite poem, Kipling's "If". Though I cannot quote them exactly, most of us are familiar with a few of its famous lines, to the effect

If you can keep your head,
when all about are losing theirs,

...
Then you'll be a man, my son.

If you can hazard all upon a toss,
and lose, and rise to try again,

...
Then you'll be a man, my son.

The spirit of this poem was truly a beacon to his life - encouragement always to try to answer those "Ifs" with "I can, and I will".

Yet Vainu was anything but solemn. He laughed, and joined in most of the games and jokes. He found the necessary paraphernalia, and organised at the Observatory what must have been the only cricket team within a few hundred miles, teaching us the mysteries of sticky wickets and googlie-balls. On one occasion he gaily commented on some virtues of yoga, to the amused condescension of some of the other graduate students. So he inveigled me into a scientific test. We both stood on our heads (one form of yoga) for ten or fifteen minutes before each major exam. And, that year, we two were the only students to pass them all. QED! (but Vainu was too gentle ever to rub it in).

In those innocent days we had never even dreamed of being given money to travel to meetings. Yet Vainu never wanted to miss a session of the American Astronomical Society. So we went to all of them in our part of the country, doing what was necessary to make it possible, such as driving in my \$75 Model A Ford, literally spending nights on the lawns of host observatories in our war-surplus sleeping bags. Hot or cold, hungry, mosquitoes - Vainu never complained, and usually managed to bring the conversation around to astronomy.

He finished his PhD in near-record time. Then, after a couple of brilliantly successful years as a post-doc at Cal Tech, he could easily have obtained a comfortable job in the US. But I never sensed any doubt in his mind. His dream was to build and to do astronomy in India. I think it is hard for us now to realize the courage of this decision - to leave the centre of world astronomy, the 200-inch, and return to an India which then, just after Independence, lacked any of the structure of modern astronomy, with essentially no institutes, telescopes, colleagues...not even a job. That first period effectively of unemployment, in the midst of such desperate poverty, might indeed have made him wonder whether - having risked his all upon a toss - he might have lost, and could he rise again?

Then came the chance, largely through his own persuasion of a reluctant minister, to build a U.P. State Observatory at Naini Tal. And shortly thereafter came Yemuna, a pillar of love and strength throughout his life. From then on the path was up. You know at least the outline of the rest, but again I think, cannot easily imagine the problems to be overcome, the incredible effort involved, in an India trying to build nearly everything at once from scratch, to in effect create three astronomical institutions, a national society, a national journal, optical and machine shops, engineering and computer contacts and facilities adequate to design and build entirely within India a 2.34-meter telescope. Yet during all this time he was constantly looking for, and then looking out for, dozens of students who are now putting India on the astronomical map.

He did these things, and more, and reached the very top. This meeting in Patras would have been the peak of his career. I believe it meant more to him than words can convey, something he had been building toward for 40 years and more. Yet, when the urgency of the operation became clear, he adjusted with remarkable speed and calm philosophical acceptance both to missing this peak, and to the very real risk of the operation.

My wife and I spent a day and a night with Vainu and Yemuna just before the operation. He was vigorously planning at least three major things for the future, finishing the Kavalu telescope, getting the 1985 IAU plans off to a good start, and, finally, contemplating the course of his life after mandatory retirement around 1985 as director. In general he was planning to travel to many institutes, to renew old friendships and make new ones, and to concentrate on science.

Now these travels will be in our memories, and the work done by others. Meanwhile our hearts are with Yemuna and with Vainu's mother. I want them to know that for us Kipling's poem has come true. Each of the "Ifs" has become a "Because", or "Since", for Vainu really did live up to all of them. And I hope his mother might take comfort in adding a final couplet:

Since you ran the course, against all odds, and won,
You did indeed become a man, my son.

II.

Inaugural Ceremony

Tuesday, 17th August 1982, 20^h

The Inaugural Ceremony was held in the Ancient Odeon, near the centre of the city of Patras, in the presence of His Excellency, Mr. Euripides Kafantaris, Governor of the Prefecture of Achaia and representatives of the City and University of Patras.

The chair was taken by Professor Constantine Goudas, Chairman of the Local Organizing Committee for the XVIIIth General Assembly of the IAU.

Two musical interludes were provided by the OTE Mixed Choir, Athens, directed by Mr. A. Papayannopoulos and the Patras Mixed Choir, directed by Mr. S. Solomos.

Professor Goudas introduced Academician J. Xanthakis, Chairman of the Greek National Organizing Committee.

Allocution de M.J. Xanthakis, Président du Comité National d'Organisation

"C'est un grand événement pour la Grèce et un grand honneur pour l'Université de Patras d'accueillir le 18eme Congrès International d'Astronomie. Des savants et des jeunes astronomes venus des différents pays du monde sont ici réunis pour présenter les résultats de leurs recherches récentes dans les différentes disciplines d'astronomie et d'astrophysique. Ils vont aussi discuter et exposer leurs idées nouvelles et leurs opinions pour les recherches de l'avenir.

Chers collègues, nous sommes ici, dans la région où a vu pour la première fois la lumière du jour, ce nouveau né, qui était la Science du Ciel, avec les observations des peuples anciens du Proche et d'Extrême Orient. Ce nouveau né, dans ce pays des Grecs anciens, avec le génie de Thalès de Millet, de Pythagore, de Philolaos, d'Héraclite et d'Aristarque de Samos est devenu un adulte.

C'est dans l'âge de la puberté que ce jeune homme a émigré quelques siècles après dans l'Occident pour se former en un jeune savant, sous l'impulsion des découvertes de Copernic, de Galilée, de Képler, de Newton et d'autres grands savants de la Renaissance et des années récentes.

C'était donc une nécessité pour les successeurs des astronomes des peuples anciens, de vouloir visiter, après 25 siècles, le lieu où a vu la lumière et a fait ses premiers pas solides, la science du ciel. Nous vous accueillons ici cordialement, dans ce petit coin de l'Europe avec sa longue histoire et sa civilisation ancienne. Mais nous regrettons que nos moyens financiers ne nous permettent pas d'être à la hauteur de notre tradition hospitalière, de "Ξενίος Διάς", de dieu Jupiter de nos

ancêtres. Les Comités d'Organisation National et Local ont essayé de faire tout ce qu'ils pouvaient pour faciliter autant que possible votre travail ici, et pour rendre votre séjour sur cette côte pittoresque du Péloponnèse aussi agréable que possible.

Professor Goudas regretted that the President of the Hellenic Republic, Mr. Constantine Karamanlis, due to urgent duties elsewhere, had been unable to come to Patras. Professor Goudas delivered the President's speech in Greek; it was thereafter given in French and English translation.

ΜΗΝΥΜΑ ΠΡΟΣ ΤΗΝ 18Η ΓΕΝΙΚΗ ΣΥΝΕΛΕΥΣΗ

Ἀποσταλέν ἀπό τόν Πρόεδρο τῆς Δημοκρατίας κ. Κ. ΚΑΡΑΜΑΝΛΗ

Μέ ιδιαίτερη ἱκανοποίηση χαιρετίζω τήν σύγκλιση τῆς 18ης Γενικῆς Συνελεύσεως τῆς Διεθνoῦς Ἀστρονομικῆς Ἐνώσεως εἰς τήν Ἑλλάδα καί καλωσορίζω τά μέλη της, εἰς τήν χώρα αὐτή, ἡ ὁποία ὑπῆρξε μία ἀπό τίς ἀρχαῖες κοιτίδες τῆς Ἀστρονομίας. Καί λυποῦμαι διότι, λόγω ἐκτάκτου ἀπασχολήσεως, δέν μοῦ εἶναι δυνατόν, παρά τήν μεγάλη ἐπιθυμία μου, νά κηρύξω αὐτοπροσώπως τήν ἔναρξη τῶν ἐργασιῶν τοῦ Συνεδρίου σας.

Εἶναι δι' ἡμᾶς ἰδιαιτέρως σημαντικό τό γεγονός ὅτι εἰς τό Συνέδριό σας μετέχουν ἐπιστήμονες ἀπ' ὅλο τόν κόσμον. Ἡ ἐνότης αὐτή μεταξύ τῶν σπουδαστῶν τοῦ διαστήματος ἀποτελεῖ ὑπόδειγμα εἰρηνικῆς συνεργασίας καί παράδειγμα, τό ὅποιο θά ἦταν εὐχῆς ἔργο νά ἀκολουθήσει ὁ ταραγμένος κόσμος τῆς ἐποχῆς μας, γιά νά ἀνακαλύψει νέους δρόμους προόδου, χάριν ὅλων τῶν λαῶν τῆς Γῆς.

Τό πρόγραμμα τῶν ἐργασιῶν σας προδίδει τήν ἐπιθυμία τῶν συνέδρων νά καταστήσουν τήν συνάντησιν αὐτή σταθμό εἰς τόν τομέα τῆς ἀνταλλαγῆς πληροφοριῶν μεταξύ τῶν μελετητῶν τοῦ διαστήματος.

Εὐχομαι ἡ προσπάθειά σας αὐτή νά ἐπιτύχει, ὅχι μόνο διὰ τό καλό τῆς ἐπιστήμης, ἀλλά καί διὰ τό καλό τῆς ἀνθρωπότητος, γενικώτερον.

MESSAGE TO THE ASSEMBLY sent by the President of the Republic

Mr. CONSTANTINE KARAMANLIS

"It is a great pleasure for me to salute the convocation of the 18th General Assembly of the International Astronomical Union in Greece, and to welcome its members to this country, which is one of the ancient cradles of Astronomy. I am very sorry, indeed, that due to unforeseen duties, it has become impossible for me to inaugurate personally the works of your Assembly.