

COMMISSION 47: COSMOLOGY (COSMOLOGIE)

Report of Meetings 18 and 21 August 1979

PRESIDENT: I.D. Novikov

18 August 1979

BUSINESS MEETING

The President described the Commission activities since the last General Assembly. The Commission had co-sponsored (with Commission 28) IAU Symposium No. 79 ("The Large-Scale Structure of the Universe") held at Tallinn, Estonia, USSR, 12 - 16 September 1977. The Symposium was attended by more than 160 astronomers, and considered the current state of knowledge on the large-scale distribution of matter in the universe. The Proceedings have now been published by D. Reidel.

The Commission was also co-sponsoring (with Commissions 28 and 48) Symposium No. 92 ("Objects of High Redshift") to be held in Los Angeles, California, USA, 28 - 31 August 1979. Dr. Reidel will also publish the proceedings of that conference.

The President thanked certain members of the Organizing Committee and others who assisted in the preparation of the Draft Report. (These are G.O. Abell, M.S. Longair, S. Hayakawa, A.G. Doroshkevich, Ya.B.Zel'dovich, A.A. Starobinsky and Y. Ne'eman.) There followed the election of President, Vice President, and members of the Organizing Committee for the period 1979 to 1982. The results are as follows:

President: G.O. Abell

Vice-President: J. Audouze

Organizing Committee: G. de Vaucouleurs, J. Gunn, S. Hayakawa, M.S. Longair, I. Novikov, G. Setti, and G.A. Tammann.

The President announced that one Commission member, V.A. Ambartsumian, felt that he could no longer remain active, and had asked to resign from the Commission. A list of prospective new members was presented and discussed; Some additional names were suggested by Commission members present. After final presentation, screening, and seconding, these candidates were elected Commission members. Their names are included in the full list of Commission members, which will be found elsewhere in this volume.

SCIENTIFIC SESSION

New Observations Relevant to Cosmology  
(Chair: I. Novikov)

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|-----------------------------|---|
| A. Penzias:                 | Primordial Deuterium in the Universe.                   |
| J. Audouze:                 | The Light Elements.                                     |
| G. Smoot (read G.O. Abell): | The Large-Scale Anisotropy of the Microwave Background. |
| Yu. Parijskij:              | The Small-Scale Anisotropy of the Microwave Background. |

- R.D. Davies: Jodrell Bank Measurements of the 3 K Background.  
I. Novikov: Further Comments on the Anisotropy.  
G. de Vaucouleurs: Status of H and the Local Anisotropy.  
B. Tinsley: Recent Work on Galaxy Counts

21 August 1979

SCIENTIFIC SESSION

Theoretical Considerations in Cosmology  
(Chair: B. Abell)

- J. Wheeler: Physics Near the Gates of Time.  
I. Segal: Chronometric Cosmology.  
F. Ahmed: Some Thoughts on Cosmology.  
G. de Zotti: Cosmic Distances from X-ray and Microwave Measurements of Clusters of Galaxies.