

## PREFACE

IAU Symposium No. 66 was held in Warsaw from September 10th to September 12th 1973, in connection with the Extraordinary General Assembly of the IAU. It was arranged by IAU Symposium No. 35 and the Scientific Organising Committee consisted of A. G. Massevitch (Chairman), A. V. Tutukov (Secretary), H. M. van Horn, N. Dallaporta, J. P. Ostriker, B. Paczyński, G. Ruben, E. Schatzman, R. J. Tayler and A. Weigert.

This volume contains the full texts of all of the invited papers presented at the Symposium, apart from that delivered by R. P. Kraft, which is published in abstract because it is appearing in full elsewhere. In addition the short communications given at the Symposium are published in abstract. I attempted to take down all of the discussion as it occurred and all contributors to the discussion were asked to provide copies of their remarks. From these sources an edited version of the discussion has been produced. As the final version has not been seen by the contributors, I should be held responsible for all errors. At Warsaw, some of the short communications did not immediately follow the invited paper to which they referred. In the printed version they and any discussion relating to them are placed in the most logical position. A small number of short communications, which were circulated in abstract at Warsaw but which were not delivered orally, are also included in the published version. The volume closes with a personal view of the present state of the subject by M. Schwarzschild.

The detailed scientific planning of the conference was mainly in the hands of Massevitch and Tutukov and the local organisation was handled by J. Smak and the Local Organising Committee for the Extraordinary General Assembly together with Paczyński, the local member of the Scientific Organising Committee. We are grateful to all of these persons for the smooth running of the Symposium. The chairmen of the six sessions of the Symposium were S. Piotrowski, R. J. Tayler, N. Dallaporta, V. Weidemann, G. Ruben and A. G. Massevitch. I am grateful to most of the contributors of the Symposium for sending me the written versions of their papers very promptly.

R. J. TAYLER