PREFACE

Volume XIX A of IAU Transactions contains the reports by Presidents of Commissions, covering the period July 1981 - June 1984. The topics of IAU Commissions deal with all of contemporary astronomy and the present volume therefore constitutes an exhaustive and unique record of astronomical research during this interval. It is particularly useful for astronomers and other scientists who want to gain an overview of a certain field, not necessarily near their own research area.

Each Commission President was requested, by early 1984, to begin preparations for the compilation of his/her Commission report. All members of Commissions were asked to supply details about their individual research programmes. The ensuing, very substantial task of concatenating was undertaken in late 1984 by the Presidents, often supported by a team of authors, all recognized authorities in their fields. In order to preserve some measure of uniformity - which is in any case very difficult with so many authors - editorial guidelines were sent to Presidents, including the number of pages allotted to each Commission.

I am most thankful to all involved, Presidents and Members of Commissions, for having put so much work into the preparation of these reports and for having complied so well with the guidelines. It is due to their great efforts that it is possible to send this volume to the printer only a few weeks after the originally indicated deadline. It will now become available well before the XIXth General Assembly in Delhi, India, on 19-28 November 1985 and shall serve as a valuable basis for the Commission meetings there.

I believe that all readers will concur about the extraordinary importance of these reports. They contain a wealth of details, not only about past and ongoing projects, but, what is perhaps even more important, also about future trends in the various disciplines. The extensive bibliographical lists form a major part, although it is a pity that the definitive recommendations for journal abbreviations etc., to be incorporated in the new IAU Style Book, were not yet available. The lack of uniformity in this respect should not, however, distract from the other virtues of this volume.

It is a pleasure to acknowledge the friendly and expert collaboration of the IAU Publisher, D. Reidel Publishing Co., Dordrecht, during the various phases of the editorial work.

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