

Foreword

A few months ago, I wrote to the 41 Presidents of the International Astronomical Union Commissions, requesting them to start preparing their contribution to these "Reports on Astronomy" which represent volume XXA of the Transactions. I specifically asked them to try to highlight the astronomical research relevant to their Commission, that took place between 1984 and 1987. During this exciting period we witnessed a few fascinating astronomical objects that appeared in the sky, such as Halley's comet, the supernova in the LMC SN 1987 A, new gravitational lenses, etc., so that these reports also contain preliminary results.

The topics of IAU Commissions deal with all of contemporary astronomy and astrophysics, so that the reports presented here should be most useful for those wishing to gain an overview of a certain field, not necessarily near their own research area. In some cases, extensive bibliographical data are provided as well. It is intended to make some publicity about the "Reports on Astronomy" so as to attempt to distribute them more widely.

Each Commission President was requested, by late 1986, to begin preparations for the compilation of his/her Commission report. Commission members were asked to supply details about their individual research programmes. The ensuing very substantial task of editing large amounts of valuable material was undertaken 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 the 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 make this volume available well before the XXth General Assembly : it will serve as a valuable basis for the Commission meetings there as well.

I look forward to receiving your comments on these Transactions so as to improve them in the future, and I hope to meet you on the occasion of the XXth General Assembly in Baltimore, next August 2-11.

Jean-Pierre Swings
General Secretary, IAU
November 1987.