## PREFACE

The conference Astrophysical Plasmas: Codes, Models, and Observations was aimed at discussing the most recent advances, and some of the avenues for future work, in the field of cosmical plasmas. It was held during the week of October 25th to 29th 1999, at the Centro Nacional de las Artes (CNA) in Mexico City, México, a modern and impressive center of theaters and schools devoted to the performing arts. This was an excellent setting for reviewing the present status of observational (both on earth and in space) and theoretical research, as well as some of the recent advances of laboratory research that are relevant to astrophysics. The demography of the meeting was impressive: 128 participants from 12 countries in 4 continents, a large fraction of them, 29%, were women, and most of them were young persons (either recent Ph.Ds. or graduate students). This created a very lively and friendly atmosphere that made it easy to move from the ionization of the Universe and high-redshift absorbers, to AGNs and X-rays from galaxies, to the gas in the Magellanic Clouds and our Galaxy, to the evolution of H II regions and PNe, and to the details of plasmas in the Solar System and the lab. All these topics were well covered with 23 invited talks, 43 contributed talks, and 22 posters. Most of them are contained in these proceedings, in the same order of the presentations (the abstracts of all papers presented during the conference are available in the Astronomical Data System abstract service, http://adsabs.harvard.edu/bib\_abs.html setting the "BibCode Template" to 2000RMxAC...9).

The idea of this meeting was first nurtured in the summer of 1998, on the porch of the house of Nancy Brickhouse and Andy Szentgyorgyi in Cambridge, Mass., enjoying long meals well seasoned with superb wine, and with the complicity of Pepi Fabbiano, Martin Elvis and John Raymond. Later that year, in México, Luc Binette and Jane Arthur got very enthusiastic about the idea, and implemented the web site for the conference. We warmly thank the rest of the Scientific Organizing Committee, Luc Binette, Pepi Fabbiano, Guille García-Segura, Chris McKee, Marco Martos, Gene Parker, Manuel Peimbert, John Raymond, Ron Reynolds, Paul Shapiro, Grażyna Stasińska, and Elena Terlevich for their help with the scientific program. We are also indebted to the rest of our Local Organizing Committee, Esperanza Carrasco, Julia Espresate, Stan Kurtz, and Alan Watson, for solving all the organizational details of this conference. Very special thanks go to Claudia Espresate, Cecilia Escalante and the technical staff of the CNA for making this a trouble-free event. We warmly thank Will Henney for the excellent work with the LaT<sub>F</sub>X macros.

Finally, we thank Lic. Saúl Juárez Vega and Mtro. Jaime Márquez Diez-Cañedo for the use of the facilities of the CNA, and Drs. Francisco Bolívar and Silvia Torres-Peimbert, heads of the Coordinación de la Investigación Científica–UNAM and Instituto de Astronomía–UNAM, respectively, for their generous financial support, which made this conference possible.

José Franco, Jane Arthur, and Nancy Brickhouse February 2000, Mexico City, Morelia, Cambridge