PREFACE

The "II International GTC Workshop: Science with GTC 1st-light Instruments and the LMT" was held in Mexico City from February 16 to 18, 2004, as part of a series of meetings of the GTC scientific community to prepare for the first year operation of the facility. A previous workshop "Science with the GranTecan" had taken place two years earlier in Granada, Spain, and a third one will be held in Florida in 2006.

It was considered important to examine in detail the science that can be obtained during the first years of operation of GTC. At the same time, synergies between GTC and LMT (the Large Millimeter Telescope, under construction in Mexico) were considered, given the overlap of their scientific communities and the expectation that both facilities will start operations about the same time. Thus the GTC community was invited to share a few days of scientific discussion on the future science to be done with the first GTC instruments and with LMT in order to stimulate collaborations among the diversity of both GTC and LMT communities for the optimal scientific use of these powerful facilities.

The scientific program, involved 7 featured talks, as well as 52 oral and 32 poster contributions. The 159 participants discussed forefront topics of astrophysics and presented their own research. At the end of three-day event some participants met in small working groups at Instituto de Astronomía, to discuss specific subjects not fully covered during the conference, which they felt should be developed further with GTC and LMT. These proceedings also include reports from three of these associated workshops.

The Scientific Organizing Committee included John Beckman (Spain), Luis Carrasco (Mexico), Stanley Dermott (USA), José Franco (chair, Mexico), Ramón García-López (Spain), Francisco Garzón (Spain), Javier Gorgas (Spain), José Guichard (Mexico), Fred Hamann (USA), Mariano Moles (Spain), Jerry Nelson (USA), Rafael Rodrigo (Spain), José M. Rodríguez-Espinosa (Spain), Francisco Sánchez (Spain), and Silvia Torres-Peimbert (Mexico). The Local Organizing Committee consisted of J. Jesús González (chair), Liliana Hernández, Ana María Hidalgo-Gámez, Elsa Recillas, Javier Sánchez-Salcedo, and Alfredo Santillán.

The site of the conference was the Castillo de Chapultepec, an emblematic installation that once housed the Observatorio Astronómico Nacional and presently the Museo Nacional de Historia. We are particularly grateful to its director Luciano Cedillo Álvarez, and the coordinator Priscilla Chavarría Rendón for their hospitality and logistic support.

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