

## PREFACE

Advanced technologies at various wavelengths have provided us with high-resolution and high-quality data of the central regions of nearby galaxies and of the Milky Way Galaxy. These data, both for the Galaxy and extragalactic centers, are now quite suitable for detailed comparative study. This IAU symposium was so organized to extend the idea of the workshop on "The Nuclei of Normal Galaxies: Lessons from the Galactic Center" organized by R. Genzel in 1993. Here, however, galactic astronomers could also learn much from extragalactic.

In this symposium, we aimed at understanding the general characteristics of dynamics, ISM physics and magnetic fields, activities including inflow and outflow, as well as starburst, in the "galactic centers". Highlights was given to several cases for massive black holes in galaxies and the Galaxy, and to understanding the physics of nuclei associated with black holes. Theorists have attempted to coherently model and interpret the data based on dynamics including N-body simulations, MHD, accretion, and jet theories. Introduction by M. Morris and a conference summary by F. Combes will help the readers to get nicely guided to the symposium program.

We, the SOC, would like to thank all the participants for their invaluable contributions to the meetings. The SOC consisted of J. Binney, F. Combes, R. Genzel (co-chair), J. Kormendy, M. Morris (co-chair), N. Scoville, M. Tsuboi and Y. Sofue (chair). The symposium was supported by IAU Commission 40 (radio astronomy), and co-supported by 28 (galaxies), and 33 (stellar dynamics and galactic structure), and the proposing division was X (radio astronomy). We thank the division president and the commission chairpersons, as well as the IAU president, general and vice-general secretaries, for their support and encouragements. Particular thanks are due to the LOC Kyoto: without their help, this symposium wouldn't have been so successful. The IAU and LOC grants were very helpful to invite many of the key speakers. Finally, our special thanks are due to Dr. Y. Takeda, who has extensively helped us in editing the proceedings manuscripts.

Yoshiaki Sofue, 1997