

PREFACE

IAU Symposium Number 141 “*Inertial Coordinate System on the Sky*” was held in Leningrad, USSR from 17–21 October 1989. The symposium also commemorated the 150th anniversary of the founding of Pulkovo Observatory. The scientific program was presented in ten half-day sessions. Most sessions were held at the Pulkovskaya Hotel, but one session which highlighted Pulkovo’s current programs was held at Pulkovo Observatory. The sessions were organized into general categories pertaining to the legacy of Pulkovo for inertial systems; current programs at Pulkovo Observatory; concepts, definitions and models; and the realization and comparison of reference frames. More than 140 scientific papers were presented, either orally or in poster form. Extensive use was made of electronic mail and computer-readable communications, and more than two-thirds of the authors made use of the opportunity to submit papers for formatting by the editors.

The meeting was truly a symposium in the Greek sense of the word—a free-flowing exchange of ideas and opinions. The final two papers presented at the symposium by Wilkins and by Westerhout are presented at an early stage in the published proceedings, in order to help focus the reader’s attention on the concepts and problems explored in subsequent papers. As pointed out by G. Westerhout in his summary, the suggestions for terminology proposed by Wilkins (p. 39) and by Han, Huang and Xu (p. 99) appeared late in the program. Indeed, if one followed all of the suggestions, the title of the symposium might have been quite different. Relativists would have removed the word “Inertial” from the title; Wilkins and Xu would have removed “Coordinate System”; and so we are left with simply a symposium “On the Sky”, which probably is quite appropriate.

Three resolutions (see page xxxiii) were adopted by the participants in the symposium concerning HIPPARCOS, VLBI, and future astrometry.

We are indebted to the members of the Scientific Organizing Committee and to co-chairman Yatskiv, for their valuable guidance and assistance in planning the symposium on rather short notice, and we appreciate the support from the Local Organizing Committee in planning the local arrangements. Their names are given on the following page.

We are indebted to several organizations and agencies for financial and other support of the symposium. The IAU provided travel grants for the participation of 16 astronomers. The Astronomical Council of the USSR Academy of Sciences and Pulkovo Observatory also generously provided assistance. The Jet Propulsion Laboratory of the California Institute of Technology provided support in organizing the symposium and Kluwer Academic Publishers generously donated some copies of the proceedings to the Scientific Organizing Committee. We are also grateful to Stephan Lieske for his assistance in developing the logo for the symposium, and to A. Sergeevsky and P. Halamek of JPL for some assistance in translations.

Finally, we are indebted to the many astronomers from convertible-currency countries who pre-paid their registration fee in convertible currency—which was matched by donations from Pulkovo Observatory in local currency to the Local Organizing Committee—and who thus provided the means for Pulkovo Observatory to purchase copies of the proceedings for astronomers from countries without convertible currency.

February 1990

The Editors.