

PREFACE

The Journées 2007 “Systèmes de référence spatio-temporels”, with the sub-title “The Celestial Reference Frame for the Future”, have been held from 17 to 19 September 2007 at Paris Observatory on its Meudon site. These Journées were the eighteenth conference in this series organized in Paris each year from 1988 to 1992 and then alternately, since 1994, in Paris (in 1996, 1998, 2000 and 2004) and other European cities, namely Warsaw in 1995 and 2005, Prague in 1997, Dresden in 1999, Brussels in 2001, Bucharest in 2002, St. Petersburg in 2003 and again Warsaw in 2005.

For organizing the Journées 2007, we have received financial supports from the Scientific Council of Paris Observatory, the French Ministry of Education and Research, the European “Descartes-nutation” project and the town of Meudon; we are grateful to these bodies or institutions for their support and we also thank the mayor of Meudon for his kind reception at the “Orangerie du Château” of the ancient Palace of Meudon.

The Journées 2007 were focused on the issues related to the recent developments, perspectives of future realizations and scientific applications of the celestial reference frame. There have been presentations and discussions related to the new Division 1 Commission 52 “Relativity in Fundamental astronomy”, IAU Working Groups on “Numerical standards in Fundamental astronomy” and “The second realization of the ICRF” that have been established at the 26th IAU GA, and the IERS Working Groups on “The second realization of the ICRF” (joint IERS/IVS WG) and “Prediction”. The recent evolution in the concepts, terminology, models and results in fundamental astronomy have been discussed, as well as topics related to the geophysical excitation of Earth rotation. There has been a special session dedicated to nutation in relation both with the “Descartes nutation” project and the 30-year anniversary of the IAU Colloquium No 78 on “Nutation and the Earth’s rotation” that was organized in Kiev in 1977. In addition, a session have been devoted to various aspects relative to prediction of the Earth Orientation.

The Journées 2007 were organized in conjunction with the IERS Workshop on Conventions, that have been held on 20-21 September 2007 at BIPM (Sèvres, France).

There were 106 participants from 26 different countries.

The scientific programme of the meeting included 7 invited papers, 37 oral communications and 30 posters. It was composed of the four following sessions:

- Session I: Plans for the new ICRF
- Session II: Models and Numerical standards in Fundamental astronomy
- Session III: Relativity in Fundamental astronomy
- Session IV: Prediction, combination and geophysical interpretation of Earth Orientation Parameters

These Proceedings are divided into four sections corresponding to the sessions of the meeting. The Table of Contents is given on pages iii to v, the list of participants on pages vii and viii and the scientific programme on pages ix to xii. The Postface on page 231 gives the announcement for the “Journées” 2008 that will be held in Dresden on 22-24 September 2008.

I am very grateful to the Scientific Organizing Committee for its valuable contribution to the elaboration of the scientific programme and to all the authors of the papers for their valuable contributions. On behalf of the SOC, I thank the Local Organizing Committee and its Chair, Daniel Gambis, for the very efficient work before and during the meeting. I am also grateful to O. Becker for his efficient technical help for the publication.

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Chair of the SOC

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