PREFACE

The Journées 2008 "Systèmes de référence spatio-temporels", with the sub-title "Astrometry, Geodynamics and Astronomical Reference Systems", were organized from 22 to 24 September 2008 at Lohrmann Observatory, Technical University in Dresden, Germany. These Journées were the nineteenth conference in this series whose main purpose is to provide a forum for researchers in the fields of Earth rotation, reference frames, astrometry and time. The Journées were organized in Paris each year from 1988 to 1992, and then alternately since 1994 in Paris (in 1996, 1998, 2000, 2004 and 2007) and other European cities, namely Warsaw in 1995 and 2005, Prague in 1997, Dresden in 1999, Brussels in 2001, Bucharest in 2002 and St. Petersburg in 2003. Nine years after the Journées 1999, the Journées 2008 were organized again in Dresden. Such an organization has been the result of an active and continuing cooperation between the Technical University of the Lohrmann Observatory and the "Systèmes de Référence Temps Espace" Department (SYRTE) of Paris Observatory. These "Journées" have been associated with the Xth "Lohrmann colloquium" which is organized, since 1958 at the Lohrmann Observatory. The meeting has been sponsored by the German Science Foundation (DFG) and the ministry of Saxony. The Proceedings are published thanks to a joint financial support from Department (SYRTE) of Paris Observatory.

The Journées 2008 were focused on the issues related to the recent developments in astronomical reference systems, interrelation of modern astrometry and Earth orientation, numerical standards and their relativistic aspects, and modelling and observations of global geodynamical processes. There have been presentations and discussions related to the Division 1 Commission 52 "Relativity in Fundamental astronomy" and the IAU Working Groups "Numerical standards in Fundamental astronomy" (NSFA) and "The second realization of the ICRF" (ICRF2). Meetings of the IAU Working Group NSFA and the IERS/IVS Working Groups ICRF2 have been organized in association with the Journées.

There were 94 participants from 18 different countries.

We thank here all the colleagues from all countries who have attended our Journées and participated in the scientific discussions. In addition to these scientific activities, the participants met during a social dinner at the "Italienisches Dörfchen" on Tuesday evening September 23.

The scientific programme of the meeting included 10 invited papers, 37 oral communications and 38 posters. It was composed of the five following sessions:

Session 1: Modern astrometry, time and theory of Earth's rotation;

Session 2: Relativity and numerical standards in fundamental astronomy, ephemerides;

Session 3: Global geodynamical modelling;

Session 4: Observations of global geodynamics;

Session 5: Developments in astronomical reference frames

These Proceedings are divided into five 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, the scientific programme on pages ix to xii and the list of posters on page xiii. The Postface on page 251 gives a preliminary announcement for the "Journées" 2010 that will be held in September 2010 in Paris.

We are very grateful to the Scientific Organizing Committee for its significant role in the elaboration of the scientific programme and to all the authors of the papers for their valuable contributions. On behalf of the SOC, we thank the Local Organizing Committee, and especially its Chair, Anke Theuser, for the very careful and efficient preparation of the meeting, the very kind welcome of the participants, and the very good local conditions and organization. We thank Ralf Langhans for his invaluable help for the preparation of the Proceedings. We are also grateful to O. Becker for his efficient technical help for the publication.

> Michael SOFFEL and Nicole CAPITAINE Chair and co-Chair of the SOC

22 July 2009