

## COMMISSION 31

## TIME

(*TEMPS*)

**PRESIDENT**

**Pascale Defraigne**

**VICE-PRESIDENT**

**Richard Manchester**

**PAST PRESIDENT**

**Demetrios Matsakis**

**ORGANIZING COMMITTEE**

**Gerard Petit, Mizuhiko Hosokawa,  
Sigfrid Leschiutta, Zao-Cheng Zhai**

## PROCEEDINGS OF THE BUSINESS SESSION, August 7, 2009

### 1. Appointment of new officials

Dr R. N. Manchester and Dr M. Hosokawa have been elected as, respectively, the new President and Vice-President of the Commission for the next term, 2009-2012. Concerning the Organizing Committee (OC) Members, we welcome as new members: Felicitas Aris (BIPM, France), Philip Tuckey (LNE-SYRTE, France), Vladimir Zharov (MSU, Russia), and Shougang Zhang (NTSC, China) and we acknowledge the outgoing members: Demetrios Matsakis, Gerard Petit, Mizuhiko Hosokawa, Sigfrid Leschiutta and Zao-Cheng Zhai. P. Defraigne remains on the OC as immediate Past-President.

### 2. Report of the triennium

P. Defraigne presented the main results achieved by the commission members during the last triennium. Concerning the relative frequency stability and accuracy of the atomic time scales, the 1-month stability of the International Atomic Time (TAI) is currently close to  $3 \times 10^{-16}$ , which is a limit with present clock performances. However, the long term stability will be improved in the near future thanks to improvements of the algorithms. The last version of TT(BIPM) was also presented with its present uncertainty of  $5 \times 10^{-16}$ . The recommendations of the Consultative Committee for Time and Frequency having an impact on the Astronomical Activities have also been reported. The evolution of the pulsar time scales during the triennium was shown with a stability of  $10^{-15}$  at 7 years currently being achieved. The presentation of the report ended with the list of meetings relating to the scope of the Commission that were held during the triennium, including in addition to the usual meetings of the time and frequency community, the Fifth International Time Scale Algorithm, April 2008 in San Fernando, the IAU Symposium 261 "Relativity in Fundamental Astronomy: Dynamics, Reference Frames, and Data Analysis", April 2009 in Virginia Beach and the Joint Discussion "Time and Astronomy" during the IAU General Assembly.

### 3. New activities

The future scope and role of the Commission was then discussed. The main function is to provide a forum and a list of contacts for discussion of issues related to time in the scientific community. The Commission brings together people from the time-standard and the astronomical communities. A focus of this effort will be to develop the Commission 31 website with information on: the relationship between UTC and UT1 (with a link to IERS), status of the discussions about leap seconds, references on atomic time scales and atomic clocks and on pulsar timing. A link to the BIPM pages on UTC (CircularT) and TT(BIPM) was additionally proposed. The role of the Commission in providing information about time to the general public was also discussed. This is also best done through the website.

#### **4. New members**

Four new members have been proposed to join the Commission. R. N. Manchester will try to increase the membership, in particular, by inviting more people from the pulsar community to become members.

#### **5. Closing remarks**

R. N. Manchester thanked P. Defraigne and the outgoing OC members for their efforts over the past three years and said that he looked forward to helping to develop the role of the Commission during the next three years.

Pascale Defraigne  
*President of the Commission*