

WG Astrometry by small ground-based telescopes

Chair : Marcelo Assafin

Observatório do Valongo,
Universidade Federal do Rio de Janeiro, Brazil

Vice-Chair: William Thuillot

Institut de mécanique céleste
et de calcul des éphémérides
IMCCE, Paris Observatory, France

- WG created in 2006, IAU GA Prague

- Web sites:

http://www.iau.org/science/scientific_bodies/working_groups/89/

<http://www.imcce.fr/astrom/>

- 25 members from 11 countries

Andrei A.H., Brazil

Arlot J.E., France

Assafin M., Brazil (Chair)

Bazey N., Ukraine

Damjlanovic G., Serbia Rep.

Ducourant, C., France

Gumerov R., Russia

Jin, Wenjing, China

Muinos Haro, J.L., Spain

Pascu D., USA

Pauwels Th., Belgium

Pinigin G., Ukraine

Prostyuk Y., Ukraine

Rylkov V., Russia

Shulga A., Ukraine

Smart, R., Italy

Souchay J., France

Stavinschi M., Romania

Tang, Zheng-Hong, China

Taris, P., France

Teixeira R., Brazil

Thuillot W., France (Vice-Chair)

Van Altena W., USA

Vieira Martins R., Brazil

Zacharias N., USA

Context

- small telescopes (less than 2m) **easier to access** than the larger ones: obs. programs on **medium and long term**.
- **valuable contribution** to the advance of our knowledge of the celestial bodies motion and position
- due to their number and their geographical spread, are very efficient for observation **in network: useful for coordinated programs**.
- useful for **teaching astrometry and astronomical practice** to the next generation

Goals

- Identify and enhance ground-based astrometric programs
- Facilitate the collaboration at the international level
- Encourage coordinated activities
- Education involvement : teaching, astrometric practice, training

Astrometry at large: measurements of positions for dynamics & fundamental astronomy, but also photometric observations of transient events for determination of body's physical parameters (size, shape, albedo, rotation, etc)

2012-2015 activities

- **Stellar astrometry** : catalogs, kinematic studies, ICRF optical counterparts, ...
- **Solar System Objects** : natural satellites, asteroids, prediction of stellar occultations, data for ephemeris development,...
- **Follow-up networks** for space missions: GBOT, Gaia-FUN-SSO
- **Artificial satellites, space debris**: catalogs, identification,...

Second astrometry school in China

12-16 November 2012

(first school has been held on April 7-12, 2008)

- 2nd astrometry spring school on «Observation of Solar System bodies and data reduction»
- location: Yunnan Observatory in Kunming, China.
- website: <http://astrometry.jnu.edu.cn>

Organizing Committee:

Dr. William Thuillot, IMCCE-Paris Observatory, France (Chairman)

Dr. Kaixian Shen, National Time Service Center of China (Co Chairman)

Dr. Jean-Eudes Arlot, IMCCE-Paris Observatory, France

Dr. Daniel Hestroffer, IMCCE-Paris Observatory, France

Dr. Alain Vienne, IMCCE-Paris Observatory, France

Dr. Anatoliy Ivantsov, Nikolaev Observatory, Ukraine

Dr. Zeki Eker, TÜBİTAK National Observatory, Turkey

Dr. Zhenghong Tang, Shanghai Astronomical Observatory, China

Dr. Qingyu Peng, Jinan University, China



2012-2015 and older activities

Further information available at:

- **web site** : www.imcce.fr/astrom/WG_Activities.html
- Report 2009-2012: in **Transactions vol XXVIII A**, or at http://host.imcce.fr/iau_wgnps/WG_Div1-ASGBT-2011.pdf
- Report 2012-2015: at http://host.imcce.fr/iau_wgnps/WGSGBT_2015.pdf

Gaia-FUN-SSO 3, Paris Obs. 24-26 November 2015

- Gaia-FUN-SSO network
57 observatories
80 telescopes
Registration : <https://gaiafunssso.imcce.fr/>



Welcome to the third
Gaia-FUN-SSO Workshop

GAIA
FOLLOW-UP NETWORK
FOR THE SOLAR SYSTEM OBJECTS
#3

IMCCE · Paris Observatory
From November 24 to November 26, 2014
77, avenue Denfert-Rochereau, 75014 Paris

Logos for IMCCE, Gaia, Observatoire de Paris, and other participating institutions are shown at the bottom.

Future of the WG

Astrometry by small ground-based telescopes

- Future actions to be defined by chairman/vice and members of the WG after the end of the current IAU reform
- Highlighted long term goals:
 - enhancement of the international collaboration for prediction and observation of stellar occultations
 - follow-up (Solar System Objects and others) in support to larger ground-based telescopes and for space missions (GAIA-FUN-SSO, ...)
 - compilation of a catalogue of small instruments (location, size, observatory facilities,...)