

# **Workshop NAROO-GAIA**

## **“A new reduction of old observations in the Gaia era”**

### **Program and schedule:**

- June 20: 10:00-13:00 and 14:30-17:00:  
Science results, reports, data mining  
17 :00 : tour in Paris Observatory (under reservation)
- June 21: 9:30-13:00 and 14:30-17:30  
Reduction, digitization, Gaia star catalogue  
19:00: social buffet
- June 22: 9:30-12:30 and 14:00-15:00  
Photographic archives and databases  
15:30: general discussion

### **Sessions and communications:**

#### **June 20, 10:00:**

Welcome to participants

#### **June 20, 10:30-13:00:**

**1) Science results, reports, data mining – 11 comm.**

Arlot J.E. (IMCCE, Paris):

Title: Re-reducing old observations: a challenge for the next decade (25 mn)

Lainey V. (IMCCE, Paris)

Title: The need of long time series of observations for the natural planetary satellites (25 mn)

Robert, V. et al. (IMCCE, Paris):

Title: First study of digitized USNO photographic plates of the Galilean satellites (25 mn)

#### **Coffee break**

Thuillot W. Bancelin D., Desmars J., Hestroffer D. (IMCCE, Paris)

Title: Asteroid data mining and precoveries in the Gaia era (25 mn)

Birlan M. (IMCCE, Paris):

Title: Near-Earth Asteroids Data mining on Astronomical Databases: Euronear experience.  
(20 mn)

#### **Lunch**

#### **June 20: 14:30-17:00**

Desmars J. (Shanghai Observatory):

Title: Estimation of Yarkovsky acceleration using data mining in the perspective of Gaia (20 mn)

Beauvalet L. (IMCCE, Paris):

Title: Interest of old data for the determination of the heliocentric distance of Pluto (20 mn)

Pascu D. (USNO, Washington DC):

Title: USNO Satellite Astrometric Observations: 1967-2003 (25 mn)

### **Coffee break**

Cooper N. (Queen Mary University of London):

Title: Cassini ISS Astrometry by the Astronomy Unit at Queen Mary, University of London - An Overview (25 mn)

Jacobson R.A. (JPL, USA):

Title: Spacecraft Based Astrometry - Description and Archival Status (25 mn)

### **June 20: 17:00:**

#### **Tour in Paris Observatory (under reservation)**

### **June 21: 9:30:**

#### **2) Reduction, digitization, Gaia star catalogue—13 comm.**

Mignard F. (OCA, Nice, France):

Title: How good would Gaia positions be in the early 1900s. ? (25 mn)

Zacharias N. (USNO, Washington DC):

Title: Star catalogs, photographic plates and errors for solar system astrometry improvements (25 mn)

De Cuyper J.P. (ROB, Brussels):

Title: Digitizing and archiving photographic plates at ROB (25 mn)

### Coffee break

Grosheva E.A., I.S. Izmailov, E.V. Khrutskaya (Pulkovo Observatory, Russia):

Title: Mobile Device for Digitizing of photographic plates: the first results. (20 mn)

Khrutskaya E., A. Berezhnoy, S. Kalinin. (Pulkovo Observatory)

Title: An old photographic plates in the Gaia era: archive plates Pulkovo observatory, digitization, results of astrometric reduction, error analysis. (25 mn)

Nedelcu D.A., P. Popescu, O. Badescu (Astronomical Institute, Bucharest):

Title: Preliminary reduction and analysis of the Bucharest Observatory photographic plates: Astrometry of asteroids (20 mn)

Li Shan-Na (IMCCE, Paris and Shanghai Obs.)

Title: Improvement of the old reductions of irregular satellites using the first publications of the data (20 mn)

## **Lunch**

### **June 21: 14:30-17:30**

Vienne A. (IMCCE, Lille, Paris):

Title: New solution for the geometric distortion in astronomical images. (20 mn)

Robert, V. (IMCCE, Paris):

Title: The level of accuracy for digitizers dedicated to astrometry (25 mn)

Shakht N.A., A.A.Afanas'eva, D.L. Gorshanov, E. V.Poliakow (Pulkovo Observatory, Russia):

Title: Long-term photographic observations for selected objects of Pulkovo program: measurements and results. (25 mn)

## **Coffee break**

Tang Zheng Hong (Shanghai Observatory):

Title: Work plan of digitizing Chinese photographic plates (25 mn)

Emelianov N. (Sternberg Astronomical Institute, Moscow, Russia)

Title: The plate archive of the Sternberg Astronomical Institute (20 mn)

Berthier J.:

Title: Skybot: a tool for data mining and selection of plates to be analyzed (25 mn)

### **June 21: 19:00: social buffet**

### **June 22: 9:30-12:30:**

#### **3) Photographic archives and databases – 11 comm.**

Ivantsov A., Hudkova L. (Nikolaev Observatory, Ukraine):

Title: Archive of photographic plates in Nikolaev Observatory and some results obtained from them (25 mn)

Kulyk I. (MAO, Kyiv, Ukraine)

Title: Overview of the database of photographic observations of natural satellites obtained at the Main Astronomical Observatory of National Academy of Sciences of Ukraine during 1961-1990 (20 mn)

Murray C. (QMUL, London):

Title: The Status of the RGO Archive (20 mn)

### **Coffee break**

Popescu P., L. Serbanescu, D.A. Nedelcu (Astronomical Institute, Bucharest):

Title: A database for the Bucharest Observatory photographic plates archive (20 mn)

Bertin E. (IAP, Paris):

Title: The DANCe project or how to recycle 15 years of archival wide-field data for kinematic studies. (20 mn)

Tsvetkova K. (Institute of Astronomy, Sofia, Bulgaria):

Title: Catalogue of Wide-Field Plate Archives (20 mn)

Xi Xiaojin (National Time Service Center, Shaanxi, China)

Title: The introduction of the natural satellites observation and orbit update by NTSC (20 mn)

Dourneau G. (Observatoire de Bordeaux, France), J.E. Arlot (IMCCE), J.F. Le Campion, C ; Ducourant (Observatoire de Bordeaux)

Title : Presentation of the Bordeaux astrophotographic old plates archive (1893 - 1996) (given by Arlot) (20 mn)

### **Lunch**

#### **June 22: 14:00-15:00**

Kiselev A.A., Kiyayeva O.V., Romanenko L.G., Shakht N.A., Kalinichenko O.A., Vasilkova O.O., Vasileva T.A., Poliakov E.V. (Pulkovo Observatory, Russia):

Title: Results of reduction of photographic plates taken with 26-inch refractor in Pulkovo observatory (given by Vasilkova) (20 mn)

Tsvetkov M. (Institute of Astronomy, Sofia, Bulgaria):

Title: Wide-Field Plate Database (20 mn)

Souchay J. (SYRTE, Observatoire de Paris):

Title: The MEGACLIP project (20 mn)

### **Coffee break**

#### **June 22: 15:30-16:30**

#### **4) General discussion:**

Topics:

international collaboration for digitizing plates

criteria and parameters for digitization

possible photometry on digitized plates

databases for files of digitized plates

selection of plates for a new reduction

and other topics...