XXXI ESOP
Clavius fourth centennial meeting

PESCARA - ICRANet CENTER
24-27 AUGUST 2012

Topics will include:
- Christopher Clavius (1538-1612)
- Eclipses and Baily's Beads
- Solar Diameter
- Sun Earth Connections
- Asteroidal and Lunar Occultations
- Observational Campaigns
- Instrumentation and Software
- Data Reduction
- Clavius Project
- Astrometry
- TNO
The XXXI European Symposium on Occultation Projects will be celebrated in ICRANet center of Pescara from 24 to 27 august 2012.

The occasion is the fourth centennial of the Jesuit Christopher Clavius (Bamberg 1538-Napoli 1612): one of the greatest astronomers working at the dawn of telescopic age and contributing to the Copernican revolution. He taught mathematics and astronomy at the Collegio Romano for four decades, earning the title of "The second Euclid" and gave a contribution to the Gregorian reformation of the Calendar (1582) of paramount importance.

The hybrid eclipse witnessed by Clavius in Rome (1567) and published on his *Commentarius on the Sphere* (1581 edition) was the first account of an annular eclipse ever published in a scientific book. According to Ptolemy's parameters such an eclipse was impossible because the angular solar diameter would never be larger than the lunar one. This eclipse was rediscussed by J. Eddy in 1978 in order to demonstrate a larger physical diameter of the Sun before the Maunder minimum (1645-1715).

The eclipse project has been carried out by several fellows of the European Section of International Occultation Timing Association (IOTA/ES), and by timing the Baily's beads the solar angular diameter is recovered up to a few hundredths of arcsecond of accuracy.

This is the trait-d'union between Clavius, IOTA and solar diameter measurements: a project to monitor the solar diameter with drift-scan methods from ground is named Clavius.

Occultation astronomy, among all classical astronomy, provides the more accurate measurements of positional and physical parameters of asteroids, TNO and stars, paving the way to all relativistic measurements. That's why the International Center for Relativistic Astrophysics Network coordinating center of Pescara welcomes this meeting.

Since more three decades ESOP gathered professional and amateur astronomers to share projects and observations based on the accurated timing of the occultations (asteroidal, lunar and Baily's beads). The yearly meetings, started before the fall of the Berlin's wall, were organized with the alternance of Eastern and Western Europe.

Pescara, on the Adriatic Sea, is also a natural gate open to the Eastern Countries, and welcomes eagerly the XXXI ESOP in 2012.