

THE BOOTES OF WORLD – WIDE NETWORK OF ROBOTIC TELESCOPES

S. Guziy, on behalf of a large collaboration group

*Mykolaiv National University, Mykolaiv, Ukraine,
gssgrb@gmail.com*

BOOTES the **B**urst **O**bserver and **O**ptical **T**ransient **E**xploring **S**ystem, is a network of astronomical observatories with sites in Southern Spain, New Zealand, China and Mexico (mostly 0.6m diameter telescope with EMCCD camera at the Cassegrain focus and a g'r'i'ZY filterset. The main goal of the network is to quickly observe transient events within few seconds/minutes of being detected by scientific satellites.

BOOTES provides an automated real time observing response to the detection of Gamma Ray Bursts **GRBs**. Error box size depending, it uses wide field cameras (WFC), ultra wide field cameras (UWFC) and narrow field cameras (NFC) attached to small robotic [telescopes](#) or the telescopes themselves. To study GRBs it is of the utmost importance to perform prompt optical follow up observations, to detect longer wavelength transient emission associated to them. BOOTES can perform such follow ups. Its scientific objectives include:

- Simultaneous and quasi simultaneous observations of GRB error boxes.
- Detection of optical flashes of cosmic origin.
- All-Sky monitoring with the CASANDRA cameras down to 10th mag every 60 s.
- Monitoring of different types of variable objects (galactic or extragalactic) down to 20th mag in order to search for optical variability.
- Discovery of comets, meteors, asteroids, variable stars, novae and supernovae.

BOOTES is part, within the framework of an international collaboration led by Spain, which started in order to support the ESA's satellite INTEGRAL with ground-based observations.