UV-BRITE: UV star in the BRITE-Constellation

Jiří Krtička

Department of Theoretical Physics and Astrophysics, Masaryk University, Brno, Czech Republic

Variable stars

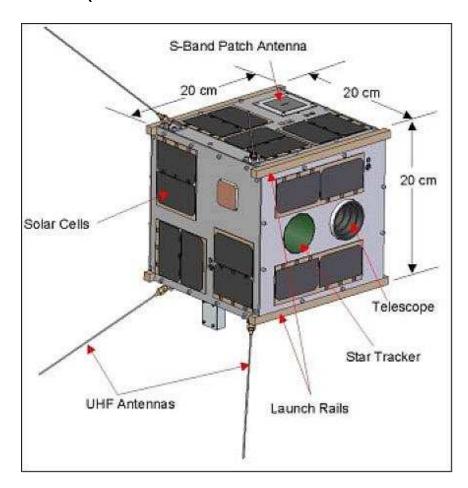
- light (flux) variability of stars
- supernovae, novae
- binary stars
- pulsating stars
- rotationally variable stars
- planet hosting stars

Variable stars: space missions

- mostly for asteroseismology and for planet hunting
- very high precission photometry, long time series
- not usable for bright stars
- CoRoT, Kepler, MOST, BRITE

BRITE-Constellation

6 nanosatellites (Austria, Poland, and Canada)



BRITE-Constellation

- 6 nanosatellites (Austria, Poland, and Canada)
- photometry of bright stars (mostly for asteroseismology)

Why UV-BRITE?

- bright stars are very well studied
- most of bright stars are hot ⇒they emit most of their energy in UV
- possibility to study different kinds of variable stars
- there was no satellite dedicated to UV photometry
- experience with UV domain

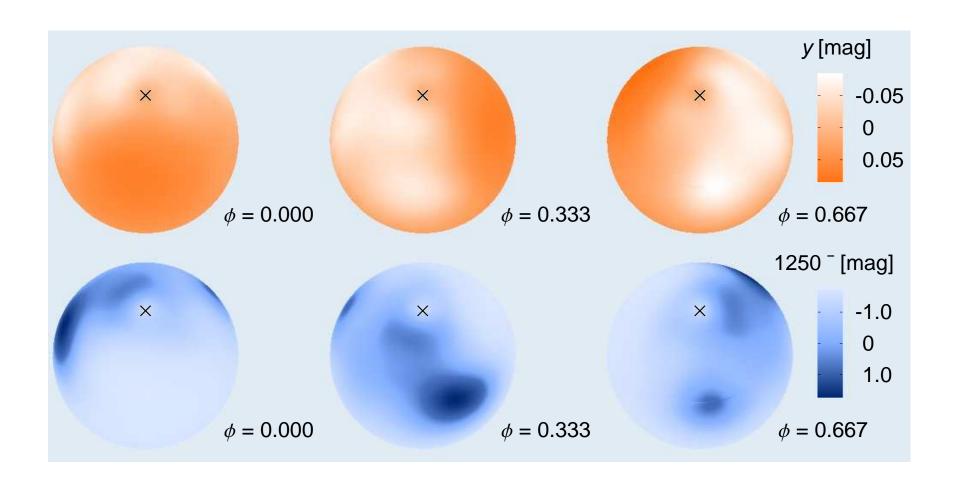
Our team

MU team:

- Jan Janík
- Jiří Krtička
- Zdeněk Mikulášek
- Ernst Paunzen
- Miloslav Zejda
- +VZLU

Example of the scientific output





CU Vir (Krtička et al. 2012)