## Fizički odsjek, PMF, Sveučilište u Zagrebu Bijenička cesta 32

## Seminar Fizičkog odsjeka

Time (s.t.) Place

Friday, 10<sup>th</sup> July 2015, **11:00**h room **F201** 

## BRITE-Constellation "Shoebox Sized" Satellites for Variable-Star Research

## Rainer Kuschnig

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BRITE-Constellation (BRight Target Explorer) consists of six nano-satellites aiming to study of variability of the brightest stars in the sky. Austria, Poland, and Canada contribute two spacecraft each all launched into low earth orbits. The satellites have the same structure: they are 20 cm cubes, 7kg mass, with a CCD photometer fed by 3 cm aperture telescopes. The main difference between pairs of satellites is the instrument passband which set to blue (400-450nm) or red (550-700nm). The main scientific objective is to obtain high precision two color photometry, with a time base of up to 160 days, of stars brighter than 4.5 mag in order to study stellar pulsations, spots, and granulation, eclipsing binaries, search for planets and also to enlarge the base of proven constant photometric standard stars. The main characteristics of the mission, the scientific goals and some first results will be presented.

Voditelji seminara FO Damir Pajić i Ivica Smolić