

KONWERSATORIUM INSTYTUTU FIZYKI UMCS

7.10.2010 r., godz. 1115, Aula IF im. St. Ziemeckiego

Prof. Zdzisław Musielak (Physics Department, The University of Texas at Arlington, USA)

"Orbital Stability of Earth-like Planets in Extra-Solar Planetary Systems"

The existence of planets orbiting more than 400 solar-type stars is now a well-established observational result. The main technique used to detect these extra-solar planets is the cyclic Doppler shift of stellar spectral lines. This technique is most sensitive to massive planets, so most detected objects are giant (Jupiter-like) planets. Orbital stability of Earth-like planets in stellar habitable zones is necessary for the evolution of any form of life. The results of our studies of orbital stability of terrestrial planets inside the habitable zones of single stars and in stellar binary systems with newly discovered giant planets will be presented. This study is of special interest because it can assist in the selection process of the extra-solar planetary system for current and future NASA and ESA missions aimed to search for Earth-like planets.

Uprzejmie zapraszam wszystkich pracowników, doktorantów i studentów Instytutu Fizyki.

Zbigniew Korczak