

Seminarium Astrofizyczne
wtorek 31.10.2023 godz. 12:30
ul. Pasteura 7, sala 404

transmisja on line
<https://www.gotomeet.me/NCBJmeetings/seminarium-astrofizyczne>
Password: AstroSemi

Miljenko Čemeljić
(Institute of Physics, Silesian University in Opava, Czech Republic)

Radio emission from pulsar-planet magnetospheric interaction

The first extrasolar planets were found around a millisecond pulsar 30 years ago, by using a timing method. Using our simulations setup for magnetospheric star-planet interaction, trained on auroras in planets of our Solar system, we estimate the radio emission from aurora on planet orbiting a pulsar. We find that, thanks to the large pulsar magnetic field, radio emission from pulsar planets should be observable with the current instruments. Such an observation would be among the first radio detections of an extrasolar planet. It would provide a powerful direct probe of the pulsar environment.

Serdecznie zapraszam,
Luis Suelves, on behalf of the SOC