**Seminarium Astrofizyczne**

wtorek 24.11.2020 **wyjątkowo** o godz. **16:00**

(Tuesday 24.11.2020 **exceptionally at 16:00)**

https://www.gotomeet.me/NCBJmeetings/seminarium-astrofizyczne

Password: AstroSemi

**Przemysław Mróz**

(Cahill Center for Astronomy and Astrophysics California Institute of Technology)

**Exploring the free-floating planet population with gravitational microlensing**

Thousands of extrasolar planets have been discovered up to date. Although many of the known exoplanets do not resemble those in our solar system, they have one thing in common - they all orbit a star. However, theories of planet formation and evolution predict the existence of free-floating planets, gravitationally unattached to any star.

Gravitational microlensing is uniquely suited for finding free-floating planets. I will present the current constraints on the frequency and properties of rogue planets in the Milky Way based on long-term observations of microlensing events in the Galactic bulge by the OGLE sky survey. I will also present several of the most promising candidate free-floating planets discovered to date. Finally, I will briefly discuss the future prospects for determining the frequency and mass function of rogue planets by the planned microlensing experiments.

 Serdecznie zapraszam,

 Agnieszka Majczyna