

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

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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