**Seminarium Astrofizyczne**

wtorek 18.05.2021 godz. 12:30

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

ID 349-387-373 Password: AstroSemi

**Marek Biesiada**

(NCBJ)

**Direct detections of gravitational waves (GW) opened a new era of GW astronomy**

Successful GW detection and observations of coalescing binary neutron star (NS-NS) system across a spectrum of electromagnetic waves (EM) elevated multimessenger astronomy to the next stage. Future generations of GW detectors on the ground and in the space will yield a significant statistics of such events reaching up to redshift z=5 and even deeper. Non-negligible ammount of such events has a chance of being strongly lensed. I will summarize and discuss new opportunities emerging from future detections of lensed GW signals. Wave phenomena concerning lensed GW signals, like diffraction fringes and beat patterns will be presented.

Serdecznie zapraszam,

Agnieszka Majczyna