

**Seminarium Astrofizyczne**  
wtorek 27.02.2018 godz. 12:30  
Hoża 69 Pawilon; sala 22

**Ewa Łokas**

(Nicolaus Copernicus Astronomical Center of the Polish Academy of Sciences)

### **Close encounters between galaxies**

I will talk about the interactions between galaxies and how they influence their dynamics and morphology. The presentation will focus on recent results of simulations following an interaction of two similar disk galaxies on unbound orbits. It turns out that the result of the interaction can be very different depending on the relative orientation of the galaxy's internal spin and its orbital spin. In the case of aligned spins and sufficiently strong interaction, it can result in the formation of a tidally induced bar and I will discuss its properties. I will also place this scenario in a wider cosmological context and present selected cases of such interactions from the Illustris simulation. The last part of the talk will concern mergers between galaxies leading to the formation of unusual, prolate rotation around the major axis of the galaxy.

Serdecznie zapraszam,  
Agnieszka Majczyna