## Sixteenth Marcel Grossmann Meeting



Contribution ID: 549

Type: Talk in the parallel session

## Orbiting blobs in accretion discs in the era of high-angular resolution and polarimetry

Wednesday, 7 July 2021 11:25 (15 minutes)

Energy shifts of radiation from accreting black holes may be caused by the fast orbital motion and the gravitational redshift near the event horizon. Individual clumps of matter experience the effects of general relativity as they gradually sink into a deep potential well. An episodic supply of material is maintained by tidal disruption events (TDE) and the emerging radiation is modulated in the X-ray domain and in longer wavelengths. Changes of polarization properties of the observed signal exhibit a specific dependence on energy. We will mention the polarimetric properties that can be revealed by the upcoming X-ray polarimetry.

Primary author: KARAS, Vladimír

**Co-authors:** Dr ZAJAČEK, Michal (Center for Theoretical Physics, Polish Academy of Sciences); Prof. ECKART, Andreas (I. Physikalisches Institut der Universität zu Köln)

Presenter: KARAS, Vladimír

Session Classification: eXTP – Enhanced X-ray Timing and Polarimetry Mission

Track Classification: High Energy: eXTP - enhanced X-ray Timing and Polarimetry Mission