



Contribution ID: 135

Type: **Oral**

Shocking news - a polarizing study of a tidal disruption event

Tuesday, 30 August 2022 16:05 (15 minutes)

I.Liodakis, K. Koljonen, D.Blinov, E. Lindfors et al.
(Presenter: E. Lindfors)

Supermassive black holes have been known to disrupt passing stars producing outbursts called tidal disruption events (TDEs) offering a unique view on the early stages of the accretion disk and jet formation. The advent of large-scale optical time-domain surveys has significantly increased the number of known events and challenged our understanding of their dynamics and emission processes. Especially, the so-called optical TDEs have shown late-time X-ray and radio emission years after the optical peak emission indicating delayed accretion disk formation and long timescales for the circularization process. In this talk, I will present our study on the most polarized TDE up-to-date without any indication of contribution from a jet to the emission. Our observations demonstrate that optical TDE emission can be powered by tidal stream shocks.

Primary author: Prof. LINDFORS, Elina (Finnish Center for Astronomy with ESO, University of Turku)

Presenter: Prof. LINDFORS, Elina (Finnish Center for Astronomy with ESO, University of Turku)

Session Classification: Polarization and TDE