Seventeenth Marcel Grossmann Meeting



Contribution ID: 13

Type: Talk in a parallel session

Shocked advective flows around black holes and associated observational signatures

Thursday, 11 July 2024 18:00 (20 minutes)

Low angular momentum flows around black holes are likely to form standing shocks during the accretion processes. The shocks possibly encounter instabilities leading to various observational signatures associated with inflows and outflows. In our work, we address a range of issues like flaring in under-luminous Sgr A* with supermassive black hole and outflow properties in super-accretors like SS 433 and ultraluminous X-ray sources with stellar-mass black holes.

References:

- 1. T. Okuda, C.B. Singh, R. Aktar, 2023, MNRAS, 522, 1814.
- 2. T. Okuda, C.B. Singh C.B., R. Aktar, 2022, MNRAS, 514, 5074.
- 3. C.B. Singh, T. Okuda, R. Aktar, 2021, RAA, 21, 134.
- 4. T. Okuda, C.B. Singh, 2021, MNRAS, 503, 586.

Primary authors: SINGH, Chandra Bahadur; Prof. OKUDA, Toru (Hokkaido University of Education)

Co-author: Dr AKTAR, Ramiz (National Tsing Hua University)

Presenter: SINGH, Chandra Bahadur

Session Classification: Spectral and temporal properties of accretion flows and jets around compact

objects and the theoretical models

Track Classification: Accretion (AC): Spectral and temporal properties of accretion flows and jets around compact objects and the theoretical models