Contribution ID: **278** Type: **Invited talk in a parallel session**

Accretion and Ejection onto Supermassive Black Holes: A Comparative Study of Persistent and Transient X-ray Sources

Tuesday, 9 July 2024 17:00 (20 minutes)

This preliminary study aims to explore the contrasting X-ray signatures of accretion and ejection processes in supermassive black holes, focusing on both persistent active galactic nuclei (AGN) and transient sources, such as tidal disruption events (TDEs), quasi-periodic eruptions (QPEs), and quasi-periodic outflows (QPOuts). We will examine the continuum emission characteristics, comparing black body radiation from the accretion disk and power-law emissions from the corona. The analysis will include absorption features, highlighting the differences between slower warm absorbers and ultra-fast outflows (UFOs) observed in both soft (0.5-2 keV) and hard X-ray (2-10 keV) bands. Additionally, we will investigate the potential impact of orbiting compact objects on the accretion disk structure, the existence of two-phase disks, and clumpy outflows. This study is still under development, aiming to elucidate the underlying physics of accretion and ejection in these varied astrophysical environments. We intend to pose open questions to stimulate discussion and inspire new research directions.

Primary author: TOMBESI, Francesco (Tor Vergata University of Rome)

Presenter: TOMBESI, Francesco (Tor Vergata University of Rome)

Session Classification: Repeating transients in galactic nuclei: confronting observations with theory

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