Contribution ID: **118** Type: **Invited/Solicited talk in mini-symposium**

Tidal Disruption Events: Probes of Accretion Physics and Black Hole Demographics

Wednesday, 13 December 2023 14:05 (20 minutes)

Tidal disruption events (TDEs) provide unique laboratories to study the demographics, immediate stellar and gaseous environments, and accretion physics of the massive black hole population. Over the past few years, time domain sky surveys such as the optical Zwicky Transient Facility (ZTF) have led to a surge of TDE discoveries in galaxy centers. I will present how detailed X-ray studies of two ZTF-discovered TDEs (AT2021ehb and AT2022cmc) have revealed the evolving inflow and outflow properties across different regimes of accretion. I will also summarize our efforts to constrain the TDE luminosity function and the shape of the local black hole mass function using a complete flux-limited ZTF TDE sample.

Primary author: YAO, Yuhan (University of California, Berkeley)

Presenter: YAO, Yuhan (University of California, Berkeley)

Session Classification: Cosmic Explosions...