A decade of black hole X-ray binary transients

Tuesday 14 September 2021 16:00 (30 minutes)

The last decade has seen a significant gain in both space and ground-based monitoring capabilities, producing vastly better coverage of BH X-ray binaries during their (rare) transient outbursts. This interval also included two of the 3 brightest X-ray outbursts ever observed, namely V404 Cyg in 2015, and MAXI J1820+070 in 2018, as well as Swift J1357.2-0933, the first such system to show a variable period optical dip. We have superb multi-wavelength archives of these outbursts, both photometric and spectroscopic, that show substantial outflows in the form of jets and disc winds, and X-ray spectroscopy/timing that reveals how the inner accretion disc evolves. There are now enough BHXTs to allow a study of their galactic distribution.

Abstract field

Primary author: CHARLES, Phil (University of Southampton)Presenter: CHARLES, Phil (University of Southampton)Session Classification: XRB I

Track Classification: X-ray and γ-ray binaries