Contribution ID: **1** Type: **talk**

Spinning Black Holes in Binaries Observed with Gravitational Waves

Monday 1 September 2025 09:50 (50 minutes)

The spins of black holes in binaries observed with gravitational waves are an essential probe of physics on multiple scales, from the astrophysical formation environments of compact binaries to fundamental physics. At the same time, the imprint of spin on the observed signals is weak, making constraints more challenging compared to the other key property of black holes, namely their mass. I will discuss how spins affect the mergers of black holes, the current status of spin measurements and its astrophysical implications, and challenges in ensuring robust and unbiased measurements.

Primary author: CHATZIIOANNOU, Katerina (California Institute of Technology)

Presenter: CHATZIIOANNOU, Katerina (California Institute of Technology)

Session Classification: Morning