



Contribution ID: 51

Type: **not specified**

Turbulent tales of stellar collapse and rebirth

Wednesday, 16 October 2024 13:15 (45 minutes)

The next Galactic core-collapse supernova will offer an unparalleled opportunity to probe the explosive rebirth of massive star to compact object across all cosmic messengers. In this talk, I will outline what multi-messenger observations can tell us about stellar evolution, the nascent compact object population, and fundamental physics. I will discuss the current prospects for detection of gravitational waves from core-collapse supernovae, and before outlining how we can seek to improve them through experimental and analytical techniques over the next twenty years. To conclude, I will muse on the impact of these topics on our understanding of the central engines driving sources of Galactic cosmic rays.

Primary author: GOSSAN, Sarah (Hofstra University)

Presenter: GOSSAN, Sarah (Hofstra University)

Session Classification: Presentations