Contribution ID: **80** Type: **Talk**

Multi-messenger signals from merging neutron stars

Wednesday, January 15, 2020 9:15 AM (45 minutes)

The first detection of a binary neutron star star system through gravitational waves and electromagnetic signals (gamma-ray burst, kilonova, radio) recently demonstrated the feasibility and usefulness of multi-messenger astronomy. In this talk, I will provide an overview of the physics of neutron star-neutron star and black hole-neutron star mergers, and of what we can learn from gravitational waves and electromagnetic signals powered by these events. I will also discuss uncertainties in existing models of merging neutron stars, and how these uncertainties still place important limits on our ability to reliably extract information from the observation of merging compact objects.

Presenter: FOUCART, Francois

Session Classification: Morning session