Contribution ID: **61**   Type: **WP1**

Facing the data-analysis challenge for the LISA mission

Gravitational waves are perturbations of spacetime that propagate out through the Universe at the speed of light.

The Laser Interferometer Space Antenna (LISA) will be the first space-based observatory to survey the source-rich milliHertz band of the gravitational-wave spectrum.

LISA will revolutionize our understanding of the Universe, providing observations of astrophysical sources ranging from Galactic white-dwarf binaries to mergers of massive black holes.

The signals from multiple gravitational-wave sources will be simultaneously present in the data, thus requiring a global data-analysis solution to efficiently isolate and characterize them.

In this talk I will review the challenges associated with analyzying the LISA data as well as the computational algorithms currently under development in order to maximize the scientific payoff of the LISA mission.

Giorno preferito

19 Dicembre Pomeriggio

Primary author: SPADARO, Alice (Università di MIlano-Bicocca)

Presenter: SPADARO, Alice (Università di MIlano-Bicocca)