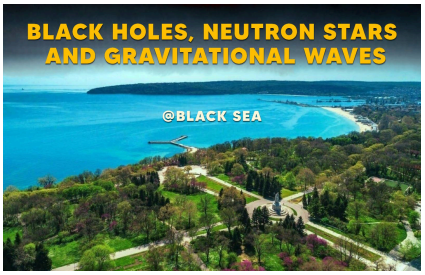

Contribution ID: **92** Type: **Oral presentation**

Black holes in modified gravity theories with large-curvature corrections

Friday 20 June 2025 09:40 (40 minutes)

The direct observation of gravitational waves gives us the opportunity to test gravity in the highly dynamical, strong curvature regime probed by coalescing black hole binaries. In particular, gravitational wave detectors are sensitive to large-curvature corrections of general relativity, mostly unconstrained by other astrophysical observations. However, theoretical consistency imposes significant constraints and limitations to the form and to the scale of these corrections. I will discuss our present understanding of the large-curvature corrections to general relativity which can leave a signature observable by present and near-future gravitational wave detectors. In particular, I will discuss some recent developments in our understanding of this fascinating family of modified theories of gravity.

Author: GUALTIERI, Leonardo (Università di Pisa)

Presenter: GUALTIERI, Leonardo (Università di Pisa)