

# Black holes in alternative theories of gravity

*Thursday, 15 June 2023 11:30 (30 minutes)*

Black holes represent ideal laboratories to test Einstein's theory of general relativity and alternative theories of gravity. Alternative theories of gravity typically introduce additional degrees of freedom, among them most prominently a scalar field. Depending on the theory, the resulting black holes may then differ significantly from their counterparts in General Relativity. Possessing hair, such black holes might, for instance, be distinguished by their shadows or by their gravitational wave spectra.

**Primary author:** Prof. KUNZ, Jutta (University of Oldenburg)

**Presenter:** Prof. KUNZ, Jutta (University of Oldenburg)

**Session Classification:** Thursday morning session