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Modified Gravity After GW170817: A window via Scalar-Photon Couplings?

Thursday, 10 July 2025 17:40 (20 minutes)

The near luminality and non-decay of Gravitational Waves (GWs) has ruled out all quartic and quintic Beyond Horndeski theories with a minimally coupled photon. In this talk, I show that — with specific couplings between the scalar and the photon — one can ensure luminal GWs and their suppressed decay in at least one viable Beyond Horndeski theory. I also discuss extensions of these scalar-photon couplings to general DHOST (Based on 2405.02281, 2412.13460)

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