Spanish and Portuguese Relativity Meeting



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Numerical explorations of well-posedness beyond General Relativity

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Many modified theories of gravity that deviate from general relativity (GR) in the vicinity of black holes or neutron stars lack a well-posed initial value problem formulation. Numerical considerations play a crucial role in solving the modified equations. Nonetheless, performing numerical simulations is only possible when the equations are well-posed. In this talk, I will focus on a single modified theory (scalar Gauss-Bonnet gravity) and show that considering additional interactions renders it well-posed.

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