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Title: Slowly rotating black holes in Quasi-topological gravity

Abstract: In this talk, we will show some features of Quasi-topological gravities as a family of higher curvature gravity up to quartic order in respect to the Riemann tensor. Here we will explore rotating solutions, in particular we will construct slowly rotating black holes in these theories. In the cubic order, the equation of the off-diagonal metric function is second order, we will impose this in the quartic case to partially remove the degeneracy of these theories. Even more, in the quartic case, the equations of motion were obtained from a consistent reduced action principle, and the functions admit a simple integrarion in terms of quadratures. Going beyond the slowly rotation regime, we will explore the Kerr-Schild ansatz in the cubic Quasi-topological gravity, under the condition the asymptotically behavior match with the General Relativity case and for two and equal oblateness parameters, this ansatz does not lead a solution for generic values of the couplings.