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Seminar of the theory group of APC

Mardi 15 Octobre 2019, 14 :00
APC, 646A - Mondrian
Domaines : gr-qc

Titre : *Hairy rotating black holes in the cubic Galileon theory*

Orateur : **Karim Van Aelst (LUTH)**

Résumé : *The gravitational wave detection GW170817 and its electromagnetic counterpart GRB170817A tightly constrained the speed of gravitational waves, and hence many modified theories of gravity. Among the Horndeski's scalar-tensor theories compatible with this observation, the cubic Galileon was known to admit static black holes different from the Schwarzschild solution. Within this context, I will present recent numerical solutions of rotating black holes which generalize the pre-existing static configurations of the cubic Galileon theory. These solutions show significant deviations from Kerr, with astrophysical implications to assess in light of the observations performed by the instrument GRAVITY and the Event Horizon Telescope.*