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Lehebel: "The hair of compact objects in Horndeski theory"

Friday, 29 September 2017 14:35 (25 minutes)

Compact astrophysical objects, like black holes and neutron stars, are going to open a new and enlightening window on gravity in the forthcoming years. The study of such objects in strong curvature regimes will a priori allow to test alternative gravity theories, like scalar-tensor models. I will discuss spherically symmetric and static objects in the framework of Horndeski theory, proving the absence of scalar hair for most models. I will also carefully classify the possible ways to escape this no-hair theorem.