

Crisostomi: Higher Order Scalar-Tensor Theories

Wednesday, 27 September 2017 10:05 (25 minutes)

Scalar-tensor theories of gravity play an essential role for building models of inflation and dark energy. For a very long time the focus has been placed on those theories leading to second order field equations, believing all the others plagued by instabilities. In this talk I will present new degenerate theories that, despite higher order in the equations of motion, are free from such a kind of pathology. Moreover, I will show that some higher order scalar-tensor theories are a useful tool to study parity violating effects in the gravity sector.