



Contribution ID: 57

Type: **not specified**

From k-essence to generalised Galileons and beyond...

Wednesday, April 20, 2011 4:55 PM (15 minutes)

We construct the most general scalar field theory whose action depends on derivatives of order two or less and is polynomial in the second derivatives of the field, under the condition that the equations of motion stay second order on flat space-time. This generalises k-essence, Galileons, k-Mouflage, the kinetically braided scalars, as well as the Euler hierarchies of Fairlie et al., avoiding at the same time ghost-like degrees of freedom. The covariantization of such models, as well as future directions, are also discussed.

Primary authors: Dr DEFFAYET, Cedric (Laboratoire APC); Dr STEER, Daniele (Laboratoire APC); Mr ZAHARIADE, George (Laboratoire APC); Dr GAO, Xian (Laboratoire APC)

Presenter: Mr ZAHARIADE, George (Laboratoire APC)

Session Classification: Contributed Talks