

MAP-fis Essay Proposal, 2014-2015

(please write in English)

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Title

Interaction of dark energy and dark matter to Standard Model States

Area

(Materials, Optics, Condensed Theory, High Energy Theory,...);

Cosmology, Particle Physics

Summary of Proposal

In this proposal it is intended to build and to examine the implications of the interaction between dark energy, dark matter and states of the Standard Model. We will be particularly interested in the study of the coupling to the Higgs and the neutrino sectors.

This is a very interesting and relevant research topic that combines several research fields, Particle Physics, Astrophysics and Cosmology, for which there is a rich literature [1-9].

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References

(to allow students first look at topic)

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