DE MADRID AL COSMOS

"The magnificent seven and friends": Horndeski theories self-tuning to de Sitter

Prado Martín Moruno
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Fecha:

Martes, 09 de junio
10:00 h.

Lugar:

Sala de Seminarios FT-I
Facultad de CC. Físicas, UCM

Abstract: The cosmological constant problem is not alleviated in the context of alternative theories of gravity generically. Focusing attention on theories with equations containing non-higher than second order derivatives, Horndeski theories, there is a dynamical adjustment mechanism able to screen any value of the cosmological constant. Under the assumption that the gravity's vacuum is described by a de Sitter geometry, the late time accelerated expansion of the universe can be understood as the result of that adjustment mechanism. I will present the Horndeski models able to carry out that kind of screening, which, therefore, have a de Sitter critical point for any type of material content. I will summarize the cosmological consequences of the resulting models, emphasizing the case with symmetry under shift redefinitions of the field.

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- Teorías Efectivas en Física Moderna (UCM)
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