

De *Madrid* al *Cosmos*

Gravity at the horizon: new probes of gravity and cosmic acceleration

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Abstract: Gravity is core to many unsolved problems in physics, including the properties of black holes, the nature of space-time and the origin of the universe. The desire to better comprehend gravity and the mounting evidence for cosmic acceleration have led to the proliferation of both alternatives to Einstein's theory and efforts to test them. I will present recent progress to understand these theories and determine the properties of gravity using gravitational waves and the large scale structure of the universe: The speed of gravitational waves will provide the most stringent test for a large class of theories, while a new generation of galaxy surveys will be sensitive to new relativistic effects on the largest cosmological scales. I will also introduce `/hi_class/` (www.hiclass-code.net `<http://www.hiclass-code.net/>`), an accurate, fast and flexible code to compute cosmological predictions in a very large class of gravitational theories.

Jueves 30 de marzo, 15:00 h.
Sala de Conferencias
CFMAC-CSIC (Serrano, 121)

Ciclo de seminarios organizado conjuntamente por los grupos

- *Teorías Efectivas en Física Moderna* (UCM)
- *Gravitación y Cosmología* (IEM-CSIC)

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