

# De *Madrid* al *Cosmos*

## Observational imprints of the interacting multiverse

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**Abstract:** The most controversial feature of the multiverse may be its testability. We present a novel paradigm of the multiverse where non-local interactions and other quantum correlations may exist among the universes of the multiverse. The interactions among universes may: i) determine some global properties of a single universe without violating its notion of causal closure; ii) produce a landscape structure of vacuum states that might lead to different process of vacuum decay; and iii) induce a pre-inflationary stage in the evolution of the universe that cannot be reproduced by any known matter content. All these effects would leave distinctive and distinguishable imprints in the properties of the CMB, making the whole proposal (and the underlying theories) testable.

Jueves 29 de septiembre, 15:00 h.  
Sala de Seminarios FT-I  
Facultad de CC. Físicas, UCM

Ciclo de seminarios organizado conjuntamente por los grupos

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

Página web: <http://loops11.iem.csic.es/madrid-cosmos>



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