

# De *Madrid* al *Cosmos*

Deformed relativistic symmetries:  
decoherence and dimensional  
reduction at the Planck scale

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Sala de Juntas

CFMAC-CSIC (Serrano, 113 Bis)

**Abstract:** I will start with a brief introduction to the framework of deformed relativistic symmetries based on Lie-group momentum spaces whose curvature sets a fundamental (Planckian) UV scale at the kinematical level. I will then show how these models can be related to a fundamental decoherence at the Planck scale and how they are relevant for the phenomenon of “dimensional reduction”, ubiquitous in a variety of approaches to quantum gravity.

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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