De *Madrid* al *Cosmos*

Playing with the Misner space and the topology

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Abstract: Topology is essential in many branches of mathematics, however, in physics, it is often taken for granted as it usually plays no crucial role. I will try to show that on some cases topology turns out to be essential in order to understand some pathological behaviors that arise in general relativity. Namely I will talk about the so-called Misner space, which shows extremely pathological behaviors that can be neatly understood through topology. Besides I will introduce the g-boundary, a topological construction introduced by Hawking and Geroch in an attempt to define properly what a singularity is, and I will prove that in the case of the Misner space, one obtains the expected g-boundary.

Jueves 15 de diciembre, 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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