

# Seminario de Geometría y Topología



**Topology change and hearing the shape of a drum**

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## Resumen:

The theory of self-adjoint extensions of the Laplace-Beltrami operator on smooth Riemannian manifolds with boundary has been used to propose a mechanism of dynamical topology change. In this talk a gentle introduction to the subject will be presented, some simple examples will be exhibited and M. Kac's classical problem on the impossibility to hear the shape of a drum will be revisited under the light of these ideas.

**Lugar:** Universidad Complutense de Madrid  
Facultad de Ciencias Matemáticas  
Departamento de Geometría y Topología, Sala 225  
**Fecha y Hora:** Martes, 29 de marzo de 2016, 12:00  
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