

# Seminario de Geometría y Topología



## **K-contact and Sasakian manifolds of dimension 5**

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### **Resumen:**

**Kollar has found subtle obstructions to the existence of Sasakian structures on 5-dimensional manifolds. Based on them, we develop methods of using these obstructions to distinguish K-contact manifolds from Sasakian ones. In particular, we find the first example of a closed 5-manifold with first Betti number  $b_1=0$  which is K-contact but which carries no semi-regular Sasakian structures.**

**(Joint work with J.A. Rojo and A. Tralle).**

**Lugar: Universidad Complutense de Madrid  
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