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SEMINARIO DE GEOMETRIA ALGEBRAICA

Viernes, 19 de enero de 2018, **11:00**, Seminario 238

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POSTECH, Corea

Impartirá la conferencia

Asymptotic invariants for Fano varieties

Resumen.

Since entering the 21st century we have witnessed dramatic developments in the study of the Yau-Tian-Donaldson conjecture concerning the existence of Kähler-Einstein metrics on Fano manifolds and stability. The challenge to the conjecture recently came to fruition. Chen, Donaldson, Sun and Tian have completed the proof of the celebrated statement that a smooth Fano manifold admits a Kähler-Einstein metric if and only if it is K -stable with respect to its anticanonical polarisation. There are not so many results concerning K -stability of specified smooth Fano varieties, not deduced by Kähler-Einstein metrics. It seems almost infeasible to consider all possible degenerations of a given Fano manifold. Even for del Pezzo surfaces, we do not have complete description of their degenerations. In this talk, I review invariants that enable us to have a detour studying K -stability of Fano manifolds.