

GEOMETRY

seminar

RIEMANNIAN LIMIT SPACES AND ALGEBRAIC GEOMETRY

PLACE: Aula Naranja, ICMAT, Campus de Cantoblanco

DATE: Tuesday, 17th January - 15:00

SPEAKER: Simon Donaldson (Imperial College and Simons Center for Geometry and Physics)

ORGANIZER: ICMAT

ABSTRACT: The Riemannian convergence theory of Gromov-Cheeger-Colding yields "limit spaces" of sequences of Riemannian manifolds under suitable Ricci curvature bounds. In the lecture we discuss the algebro-geometric interpretation of these, in the case of Kahler metrics. The crucial notion is that of a tangent cone at a point of a limit space. The first part of the talk will be based on older joint work with S. Sun and in the last part we will outline important recent results of H-J Hein and Sun.