

SPECIAL COLLOQUIUM

SUPERINTEGRABLE SYSTEMS

SPEAKER: Nicolai Reshetikhin (University of California, Berkeley)

DATE: Wednesday, 23 October 2019 - 12:30

VENUE: Aula Naranja, ICMAT

ABSTRACT: The superintegrability is a refinement of Liouville integrability in classical Hamiltonian mechanics. In a superintegrable system the dimension of invariant tori have an upper bound that can be strictly less then half of the dimension of the phase space. In the first part of the talk the Liouville integrability will be reminded and the notion of superintegrable systems will be introduced. A classical example of superintegrability is the Kepler model. The talk will be concluded with new examples related to moduli spaces of flat connections and to a classical counterpart of Harish-Chandra systems in representation theory.











