

February 28: Ivan Losev (Moscow State University and Rutgers University), “A uniqueness property for smooth affine spherical varieties.” FOLLOWED BY DINNER.

Let G be a connected reductive algebraic group over an algebraically closed field of characteristic 0. A normal irreducible G -variety X is called spherical if a Borel subgroup of G has an open orbit on X . It was conjectured by F. Knop that two smooth affine spherical G -varieties with the same weight monoids are isomorphic as G -varieties. Here by the weight monoid of X we mean the set of highest weights of the algebra of regular functions on X considered as a G -module. It was proved by Knop that this conjecture implies a uniqueness property for multiplicity free Hamiltonian actions of compact groups on compact real manifolds (the Delzant conjecture). In the talk I am going to outline my recent proof of Knop’s conjecture (arXiv:math/AG.0612561).