

Columbia University

Algebraic Geometry Seminar

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HAMILTONIAN MANIFOLDS AND DELZANT'S CONJECTURE

Let K be a compact connected Lie group. A Hamiltonian K -manifold is a symplectic K -manifold which is equipped with a moment map. Such a manifold is called multiplicity free if the action is "as transitive as possible". More precisely, this means that all symplectic reductions are points. Delzant conjectured in 1990 that multiplicity free manifolds are uniquely determined by two data: the generic isotropy group and the image of the moment. In the talk we will explain how to reduce this conjecture to a purely algebraic question on spherical varieties. This latter conjecture has been recently proved by R. Camus for the case that the group is of type A .

Friday, March 1, 2002

2:30pm

Mathematics 417