

Jun-Muk Hwang (KIAS Seoul)

Fibrations of projective irreducible symplectic manifolds

TIME:

18 Nov 2008, 9:30 - 11:00

LOCATION:

HU-Berlin

Rudower Chaussee 25, Raum 3.006 (Haus 3, Erdgeschoss)
12489 Berlin-Adlershof

Given a projective hyperkaehler manifold M of dimension $2n$, a projective manifold X and a surjective holomorphic map $f: M \rightarrow X$ with connected fibers of positive dimension, we prove that X is biholomorphic to the projective space of dimension n . The proof is obtained by exploiting two geometric structures at general points of X : the affine structure arising from the action variables of the Lagrangian fibration f and the structure defined by the variety of minimal rational tangents on the Fano manifold X .

Contact:

Humboldt-Universität zu Berlin . Institut für Mathematik
SFB 647 . Unter den Linden 6 . 10099 Berlin
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727
sfb647@math.hu-berlin.de