

Twisted Fourier-Mukai transforms for holomorphic symplectic manifolds

Justin Sawon

Department of Mathematics SUNY at Stony Brook
Stony Brook, NY 11794-3651
U.S.A.

Abstract

In his thesis, Caldararu described twisted Fourier-Mukai transforms for elliptic fibrations. In this talk I will describe how certain holomorphic symplectic manifolds can be deformed to integrable systems, i.e. fibrations by abelian varieties. These are higher dimensional analogues of elliptic K3 surfaces, and twisted Fourier-Mukai transforms once again arise.