

1081-14-301

**Jason Lo\*** ([locc@missouri.edu](mailto:locc@missouri.edu)), Mathematics Department, 202 Mathematical Sciences Building, University of Missouri, Columbia, MO 65211. *Stable complexes and Fourier-Mukai transforms*. Preliminary report.

Given a Fourier-Mukai transform between the derived categories of two varieties, one natural question is, does it take stable sheaves to stable sheaves? After the recent constructions of moduli of stable complexes, we can also ask, does the Fourier-Mukai transform take stable complexes to stable sheaves? Building on the work of Bridgeland's and Maciocia's, I will consider the latter question for elliptic fibrations. (Received February 13, 2012)