

1012-14-122

Aaron Bertram* (bertram@math.utah.edu), Department of Mathematics 155 S 1400 E Rm 233, Salt Lake City, UT 84112-0090. *Moduli spaces of derived objects on a K3 surfaces.*

Physics has given us (algebraic geometers) a new notion of stability for objects in the derived category of a K3 surface. This has been explored by Bridgeland and by Abramovich-Polishchuk, among others. I will explain some very concrete examples, where the moduli spaces are constructed via a sequence of Mukai flops from a moduli space of coherent sheaves. If time permits, I will also exhibit Thaddeus flips embedded in the Mukai flops. This is all joint work with Daniele Arcara. (Received September 15, 2005)