1057-14-126 **Duiliu Emanuel Diaconescu*** (`duiliu@physics.rutgers.edu`), 126 Frelinghuysen Rd, Piscataway, NJ 08854. *ADHM Sheaves in Mathematics and Physics.*

This talk will be centered on a new connection between counting problems in algebraic geometry and certain moduli spaces of decorated bundles on curves. Wallcrossing formulas for virtual counting invariants will be derived using the formalism of Joyce and Song. Applications to local stable pair invariants and generalizations will be also presented. (Received January 17, 2010)