



GEOMETRY, TOPOLOGY, AND PHYSICS SEMINAR

Quiver Representations and D0/D2/D6 Bound States

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Friday, November 21st, 2008, 4:00 p.m.
Room 6635 South Hall

Abstract: Remarkably the geometry of a singular Calabi-Yau threefold is intricately related to the moduli space of representations of an associated quiver with relations. While the relations associated to an arbitrary Calabi-Yau threefold are somewhat mysterious from a mathematical perspective, they are naturally encoded in what physicists call a superpotential. Recently Szendroi and Nagao-Nakajima analyzed fixed points of torus actions on the moduli space of framed A-modules. In this talk we will relate their work to the physical interpretation given by Chuang and Jafferis in terms of D0/D2/D6 BPS bound states.