MSRI–Evans Talk

Monday, 4:10–5:00pm, MSRI, Simons Auditorium – Note Location Change

---

Mar. 2 **Tom Bridgeland**

Hall algebras and wall-crossing

The Hall algebra of the category of finite abelian groups goes back to work of Steinitz in the early years of the last century. In the early 1990s Ringel used Hall algebras of categories of quiver representations as an approach to quantum groups. More recently, Joyce, Kontsevich and Soibelman and others have used Hall algebras as a tool to study wall-crossing phenomena, i.e. the way moduli spaces of algebro-geometric objects vary with the stability parameters. Following Reineke I will explain how this works in the down-to-earth setting of representations of quivers, where all the key ideas can already be seen.