

***Tuesday, January 31 @ 4:00 PM***

***Physics & Astronomy Building (PAB) 4-330***

## **Phases and RG flows of 4d (susy) gauge theories**

**Ken Intriligator (UCSD)**

Supersymmetry provides a handle for gaining insights into the dynamics of quantum field theory. I will review some exact results and dualities for four dimensional  $N=1$  supersymmetric theories, such as super-QCD, and variants with additional, other matter representations. Most of the talk will be based on work with Emily Nardoni, <https://arxiv.org/pdf/1604.04294.pdf>

We discuss aspects of theories with superpotentials that are given by Arnold's ADE singularities, and the resulting RG flows and IR theories.