

$$\sum_{\{i,j\} \sqcup \{k,l\} = \{0,1,2,3\}} \frac{3\lambda_i(2\lambda_i + \lambda_j)(\lambda_i + 2\lambda_j)3\lambda_j}{(\lambda_k - \lambda_i)(\lambda_k - \lambda_j)(\lambda_l - \lambda_i)(\lambda_l - \lambda_j)} = 27$$

The Trivial Notions Seminar
Proudly Announces

Localization to 27 Lines on the Cubic Surface

A talk by
Cheng-Chiang Tsai

Abstract

Initiated by Kontsevich, localization theorems have been important tools in computing Gromov-Witten invariants, namely counting curves in various spaces. In this talk we aim to introduce the general algorithm for counting curves in complete intersections in projective spaces (or toric varieties) via localization, by restricting our attention to the probably first non-trivial case of counting lines on a general cubic surface in \mathbb{P}^3 . In particular, we'll give a sketchy review of equivariant cohomology and the Atiyah-Bott localization formula, with which we can go back to our algebro-geometric setting and reduce the computation of lines on a cubic to the above identity.

Thursday September 27th, at 1:30 pm
Science Center 507