

“Surprisingly, Math. has earned its rightful place for man and in sky; Fondling flowers with a smile – just wish nothing is said!” —Shiing Shen Chern

The Trivial Notions Seminar Proudly Announces

Counting covers of an elliptic curve

A talk by
Dawei Chen

Abstract

Last year at the trivial notions talk, I showed how to count certain plane rational curves. This year let us move on to count for fun with elliptic curves. More precisely, we want to count the number of distinct degree d , genus g simply branched covers of a $2g - 2$ pointed elliptic curve. The problem can be equivalently stated as a combinatorial problem about symmetric groups. After using some reduction steps and a little representation theory, we will obtain a nice generating function as the final solution, which can also be related to certain quasimodular forms.

Friday, December 1st, 2006 at 2:00 pm
Science Center 507