樊 宏 路

紫金港 东 6-416

May 18, 2013, Saturday, 13:30-16:30

Title The construction of $\bar{M}_{0,n}$

Abstract Before heading to the topic, I will first "define" fine moduli spaces and coarse moduli spaces in the language of category theory, and then do some examples. $M_{0,n}$ is the space parametrizing all n-point tuple in P^1 up to a projective transformation, and $\bar{M}_{0,n}$ is one of its compactification. In 1994, Kontsevich solved the old question: In P^2, how many degree d rational curves pass through a general $3d-1$ points. And a generalization of $\bar{M}_{0,n}$ was a central object in his proof. To roughly have some idea about this space can be a starting point of learning Gromov-Witten theory.

In this talk I will talk about its construction and some other related stuff. There will be pictures. I will give set-theoretic evidence, but won't give the details of the proofs in the construction.

People say the reference below is a great undergraduate book on Gromov-Witten theory. My things will be mostly from the first chapter of this book.

Reference

J. Kock and I. Vainsencher, *Kontsevich's Formula for Rational Plane Curves*. (http://www.mat.ufmg.br/ israel/jojoEE.pdf)