Mathematics, Statistics, and Computer Science   **@ UIC**

Special Colloquium

Stable logarithmic maps

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Abstract: Gromov-Witten theory, motivated from string physics, is the virtual counting of stable maps from nodal Riemann Surfaces to a target projective variety. The method of degeneration provides a powerful tool in the calculation of Gromov-Witten invariant. This has led to the study of relative stable maps which are stable maps with prescribed tangency conditions along fixed boundary divisors.

In this talk, I will introduce the theory of stable logarithmic maps, which provides a natural compactification of the space of relative stable maps. This theory not only gives us more flexible ways of degeneration in Gromov-Witten theory, but also provides a useful tool in birational geometry.

There will be a Meet and Greet Tea (after the Colloquium) in SEO 300.

Tuesday, December 2 at 3:00 PM in SEO 636