Birational Geometry of Moduli Spaces of Stable Curves: Model with Three Avatars.

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Abstract

Geometric questions about the moduli space of stable curves of genus $g$ are of interest in many cognate areas of algebraic geometry. For example, $\overline{M}_g$ has been extensively studied as a test case for general questions from the minimal model program in birational geometry, where its modular interpretation provides extra tools for answering these questions. I will introduce the notion of moduli, recall some basic properties of stable curves and their moduli spaces $\overline{M}_g$, and then touch on a few highlights of thirty years of progress in our understanding of the birational geometry of $\overline{M}_g$ focusing on a set of models that arise as answers to three very different questions of this type.

Wednesday, 22 April 2015
4:00 pm
Smith Hall 204
Tea and refreshments will be served at 3:45pm.

http://math.newark.rutgers.edu/~xiaowwan/Colloquium/