

Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

12:00 pm, Tuesday, November 17, 2015, 345 Altgeld Hall

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Constructing solutions of Hitchin's equations near the ends of the moduli space

Abstract: Hitchin's equations are a system of gauge theoretic equations on a Riemann surface that are of interest in many areas including representation theory, Teichmüller theory, and the geometric Langlands correspondence. In this talk, I'll describe what solutions of $SL(n, \mathbb{C})$ -Hitchin's equations "near the ends" of the moduli space look like. This construction generalizes Mazzeo-Swoboda-Weiss-Witt's (2014) construction of $SL(2, \mathbb{C})$ -solutions of Hitchin's equations where the Higgs field is "simple." This is ongoing work.

No video available.