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

Geometry, Topology and Dynamics Seminar

A construction of limiting solutions of Hitchin's equations

Laura Fredrickson (University of Texas at Austin)

Abstract: I'll describe a construction of solutions of Hitchin's equations on a compact Riemann surface near the "ends" of the SL(n,C)-Hitchin moduli space. This construction generalizes Mazzeo-Swoboda-Weiss-Witt's construction of SL(2,C) solutions of Hitchin's equations where the Higgs field is "simple". In the generalized construction, moduli spaces of irregular connections arise. This is ongoing work.

Monday, November 16 at 3:00 PM in SEO 636