Analysis and Differential Geometry Colloquium

Solving geometric variational problems by gluing

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Abstract: In this talk I will describe give a schematic overview of a technique for constructing new solutions of geometric variational problems from known ones, called "gluing." I will focus on two examples which share a key feature, namely, conformal invariance. I will begin with an outline of the work of D. Joyce, who used gluing techniques to construct metrics of constant scalar curvature. Then, I will then describe some recent work with J. Viaclovsky, in which we create new examples of four-manifolds which are critical points of L^2-curvature functionals.

Thursday, March 27, 2014, 4:00 pm
Mathematics and Science Center: W301

Mathematics and Computer Science
Emory University