DIFFERENTIAL GEOMETRY/PDE SEMINAR

FRIDAY, MARCH 28, 2014 PADELFORD C-401 1:30PM-2:30PM

Homotopy classes of stratified harmonic 2-spheres and applications to geometric flows

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We show that the set of harmonic maps from the 2-dimensional stratified spheres with uniformly bounded energies contains only finitely many homotopy classes. We apply this result to construct infinitely many harmonic map flows and mean curvature flows of 2-sphere in the connected sum of two closed 3-dimensional manifolds $M_1 \neq S^3$ and $M_2 \neq S^3$, RP^3 , which must develop finite time singularity. This is joint work with Y.X. Li.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link Seminars, Colloquia, and Conferences).

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