DIFFERENTIAL GEOMETRY/PDE SEMINAR

Friday, March 20, 2015 Padelford C-36 4–5PM

Stratified harmonic 2-spheres and finite time singularity of geometric flows of surfaces

Jingyi CHEN

(UBC)

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).

The University of Washington is committed to providing access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation contact the Disability Services Office at least ten days in advance at: 206-543-6450/V, 206-543-6452/TTY, 206-685-7264 (FAX), or dso@u.washington.edu.