Critical Metrics on Connected Sums of Einstein Four-Manifolds

Jeff Viaclovsky
(U of Wisconsin, Madison)

I will discuss a gluing procedure designed to obtain canonical metrics on connected sums of Einstein four-manifolds. The main application is an existence result, using two well-known Einstein manifolds as building blocks: the Fubini-Study metric on $\mathbb{CP}^2$, and the product metric on $S^2 \times S^2$. Using these metrics in various gluing configurations, critical metrics are found on connected sums for a specific Riemannian functional, which depends on the global geometry of the factors. This is joint work with Matt Gursky.

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.