

Geometry, Topology and Dynamics Seminar

The diameter of the L^1 -metric on the group of area-preserving diffeomorphisms of S^2 .

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Abstract: We use a geometric idea to give an analytic estimate for the word-length in the pure braid group of S^2 . This yields that the L^1 -norm (and hence each L^p -norm, including L^2) on the area-preserving diffeomorphism group of S^2 is unbounded. This solves an open question arising from the work of Shnirelman and Eliashberg-Ratiu. Joint work in progress with Michael Brandenbursky.

Monday, November 30 at 3:00 PM in SEO 636