

The Oliver Club

www.math.cornell.edu/~oliver/

The Wave Map Problem

The talk will review recent progress on the wave map problem. Wave maps are dynamic Lorentzian analogs of harmonic maps which appear in a description of ferromagnets, symmetry reductions of the Einstein equations and toy models of QFT. A particular focus will be on a joint work with J. Sterbenz in which we constructed critical wave maps, with a 2-dimensional sphere target manifold, developing finite time singularities. We will discuss the dynamics of the blow up, its connection with the finite dimensional geodesic dynamics on the moduli space of harmonic maps and a super-symmetric nature of the latter space.



Igor Rodnianski

Princeton University

Refreshments will be served at 3:55 PM in the Mathematics Department lounge (532 Malott Hall).

**Thursday, November 9, 2006
at 4:25 PM in 406 Malott Hall**