

Almost global existence for nonlinear wave equation on d-dimensional spheres

DARIO BAMBUSI - *University of Milano*

Joint work with J.M. Delort (University of Paris XIII), B. Grebert (University of Nantes)
and J. Szeftel (University of Paris XIII)

I will present an almost global existence results for Klein-Gordon equations on spheres manifolds with Hamiltonian nonlinearities, when the Cauchy data are smooth and small. The proof relies on Birkhoff normal form methods and on the specific distribution of eigenvalues of the laplacian perturbed by a potential on spheres. This is a joint work with Delort, Grebert, Szeftel.