SEMINARIO DI ANALISI ARMONICA

giovedì 22 novembre 2007
ore 11.00

Scuola Normale Superiore
Pisa
(Aula Tonelli)

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Terrà un seminario dal titolo:

"Global wellposedness and scattering results for nonlinear Schrödinger equations on hyperbolic spaces"

Abstract

We study the dispersive properties of the Schrödinger equation on hyperbolic spaces, obtaining Strichartz estimates for a broader family of admissible pairs of exponents.
As a first consequence, we obtain considerably stronger wellposedness results for NLS. A second important application of our global Strichartz estimates is to prove scattering for NLS both in L^2 and in H^1, without any assumption of symmetry or gauge invariance. Notice that, in the euclidean case, this is only possible for the critical power 1+4/n and can be false for subcritical powers, while on the hyperbolic space global existence and scattering of small L^2 solutions holds for all powers strictly between 1 and 1+4/n. This is a direct effect of the negative curvature

Tutti gli interessati sono invitati a partecipare.

La Segreteria della
Classe di Scienze

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