



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Lunedì 3 giugno 2019
ore 14:00

Scuola Normale Superiore
Pisa
Aula Bianchi

William Borrelli

(Centro De Giorgi, Scuola Normale Superiore)

Terrà un seminario dal titolo:

“Qualitative properties of critical Dirac equations”

Abstract:

Critical nonlinear Dirac equations appear in problems from Geometric Analysis, like the spinorial Yamabe problem or the immersion of constant mean curvature surfaces, and in Mathematical Physics, as effective 2D models for the wave propagation in graphene and in honeycomb structures. In this talk I will present recent results on the asymptotic behavior of solutions and on their regularity. Such results hold in dimension n greater or equal than two and for a large class of nonlinearities of critical growth. Solutions of a particular form have been classified. In particular, in physically relevant cases in 2D we show that all possible asymptotic behaviors are realized.

This is a joint work with R.L. Frank (LMU Munich & Caltech).

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze