SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

Giovedì 5 novembre 2015
ore 11:00

Scuola Normale Superiore
Pisa
Aula Tonelli

Ben Sharp

Centro De Giorgi, SNS

Terrà un seminario dal titolo:

"Quantitative and qualitative control of minimal hypersurfaces with bounded index and area"

Abstract:
Due to the work of Almgren-Pitts (and Schoen-Simon) we know that there exists at least one closed minimal embedded hypersurface in any closed Riemannian manifold; moreover a conjecture of Yau suggests that there should be infinitely many. This has been confirmed recently by the work of Marques-Neves in the case that the ambient manifold has positive Ricci curvature. There are therefore many open problems concerned with understanding the space of minimal hypersurfaces in a Riemannian manifold. In this talk we will discuss some compactness theorems for minimal hypersurfaces with bounded index and area; in particular we prove that the total curvature is quantised by the limit hypersurface and finitely many properly embedded minimal hypersurfaces in Euclidean space. Easy corollaries of this result lead to qualitative estimates on topology and total curvature for minimal hypersurfaces with bounded index and area. Most of the work we present is joint with Reto Müller.

Tutti gli interessati sono invitati a partecipare.

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