

FIM

Nachdiplomvorlesung

Emmanuel Hebey (Université de Cergy-Pontoise, Paris)

Compactness and Stability for Nonlinear Elliptic Equations

February 28 - May 29, 2012
Tuesdays 10.15 - 12.00h
HG G 43
ETH Zürich, Rämistrasse 101

Abstract

This series of lectures is devoted to the study of compactness and elliptic stability for nonlinear elliptic equations in the inhomogeneous context of closed Riemannian manifolds. We describe blow-up phenomena from the Lebesgue theory to the pointwise theory, and discuss the progress made in the field over the past years. Special attention will be devoted to the model case of the nonlinear stationary Schrödinger equation and to its critical formulation. Other important models will be discussed.

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