

eman ta zabal zazu



Universidad Euskal Herriko
del País Vasco Unibertsitatea

Seminario de análisis matemático y aplicaciones
Analisi matematikoa eta aplikazioak mintegia

Sobolev's and Hardy-Littlewood-Sobolev's inequalities

GASPARD JANKOWIAK

Laboratoire de Mathématiques de Besançon,
France

ABSTRACT: The sharp Sobolev's and Hardy-Littlewood-Sobolev's (HLS) inequalities are dual of each other, as was shown by Lieb in 1983. We show how this duality can be used to control the defect in the Sobolev's inequality by the defect in the HLS's inequality. That is, duality provides an improved Sobolev's inequality. Using a non linear diffusion flow and some other tools, we provide estimates on the best constant for this new inequality.

LUGAR / LEKUA:

Sala de seminarios de la sección de matemáticas

Matematika ataleko mintegi gela

DÍA Y HORA / EGUNA ETA ORDUA:

04/12/2014, 12:00