

## Third South West Regional PDE Winter School 10 & 11 February 2011 University of Bristol

## Abstract

## Aldo Pratelli, Università di Pavia On the quantative versions of isoperimetric and spectral inequalities

We will describe the problem of finding quantitative versions to various classical geometric or functional inequalities. After a general introduction and many examples, we will focus in particular on the case of the spectral inequalities, presenting the state of the art and a couple of new results involving the second eigenvalues of the Dirichlet and of the Neumann Laplacian respectively. This two new results are in collaboration with Lorenzo Brasco (Napoli).