A class of very degenerate operators: existence through convexity

Isabeau Birindelli

In a recent paper with Galise and Ishii we have proved existence of solutions for the Dirichlet problems involving the Truncated Laplacians, a class of very degenerate fully nonlinear operators, when the domain is hula hoop i.e. uniformly convex and the first order term is small. We shall see which of these conditions can be removed and which can't. We shall also treat problems that involve equations with non linear zero order terms.

I. Birindelli, Dipartimento Guido Castelnuovo, Sapienza Università di Roma

*E-mail address*i: isabeau@mat.uniroma1.it