

PABLO BLANC

Maximal Operator for the p-laplacian family

The common thread of this talk will be the equation

$$\max\{-\Delta_{p_1}u, -\Delta_{p_2}u\}=0.$$

In the first part of the talk I will introduce the game that we call unbalanced tug-of-war game with noise. We will discuss some aspects of the game and how it is related to the above equation. In the second part I will introduce a construction that relates the obstacle problem with solutions to maximal equations as the one driving this talk.

[1] PB, Juan P. Pinasco, and Julio D. Rossi. "Maximal operators for the p-Laplacian family." *Pacific Journal of Mathematics* 287.2 (2017): 257-295.

[2] PB, Juan P. Pinasco, and Julio D. Rossi. "Obstacle problems and maximal operators." *Advanced Nonlinear Studies* 16.2 (2016): 355-362.