Tug-of-war games and PDEs.

JULIO DANIEL ROSSI

Universitat d'Alacant

ABSTRACT:

In this talk we review some recent results concerning Tug-of-War games and their relation to some well known PDEs. In particular, we will show that solutions to certain PDEs can be obtained as limits of values of Tug-of-War games when the parameter that controls the length of the possible movements goes to zero. Since the equations under study are nonlinear and not in divergence form we will use (and explain) the concept of viscosity solutions.