

Tug-of-war and the Infinity Laplace equation with Neumann boundary conditions

Tonci Antunovic
UCLA

January 16, 2013

Tug-of-War is a class of stochastic zero sum, two player games played by moving a token in a domain until it hits the boundary. In a work of Peres, Schramm, Sheffield and Wilson these stochastic games were used to obtain new results on the existence and uniqueness of solutions for certain Infinity Laplace equations with Dirichlet boundary conditions. In this talk we will study the limiting behavior of the game values for Tug-of-War of prescribed horizon, and use it to prove the existence results for the Infinity Laplace equation with vanishing Neumann boundary conditions. This is a joint work with Yuval Peres, Scott Sheffield and Stephanie Somersille.

The talk will be at 4:30pm, in room 704 Thackeray Hall.