THE 5TH SYMPOSIUM ON ANALYSIS & PDES

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Luis Caffarelli, *University of Texas at Austin* **MINICOURSE. Fractional obstacle problem: optimal regularity** *Abstract.* We will discuss the obstacle problem for fractional Laplacian: basic properties of the solution, initial regularity, monotonicity formula for convex solutions and optimal regularity, the Almgren monotonicity formula and stable points, regularity of the free boundary in a neighborhood of such points.