Calderón-Zygmund Analysis Seminar

Monday, October 25th, 3:45 pm

Strong unique continuation and local asymptotics at the boundary for fractional elliptic equations

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Abstract. We study local asymptotics of solutions to fractional elliptic equations at boundary points, under some outer homogeneous Dirichlet boundary condition. Our analysis is based on a blow-up procedure which involves some Almgren type monotonicity formulae and provides a classification of all possible homogeneity degrees of limiting entire profiles. As a consequence, we establish a strong unique continuation principle from boundary points. This is a joint work with A. De Luca and V. Felli.