

SPEAKER:

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TITLE:

Nodal Sets and Doubling Conditions in Elliptic Homogenization

ABSTRACT:

This talk is concerned with uniform measure estimates for nodal sets of solutions in elliptic homogenization. We consider a family of second-order elliptic operators in divergence form with rapidly oscillating and periodic coefficients. We show that the $d-1$ dimensional Hausdorff measures of the nodal sets of solutions in a ball are bounded uniformly. The proof relies on a uniform doubling condition.

This is a joint work with Fanghua Lin.