SPEAKER:

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TITLE:

Counter-example in boundary unique continuations

ABSTRACT:
Unique continuation property is a fundamental property for harmonic functions, as well as a large class of elliptic and parabolic PDEs. It says that if a harmonic function vanishes at a point to infinite order, it must vanish everywhere. In the same spirit, we are interested in quantitative unique continuation problems, where we use the growth rate of a harmonic function to deduce some global estimates, such as estimating the size of its singular set. In this talk, I will talk about some boundary unique continuation results, and show that these results are sharp by giving explicit examples using harmonic measures. This is joint work with C. Kenig.