Temple University Mathematics Colloquium

Michael Lacey

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will speak on

The two weight inequality for Hilbert and Cauchy operators on the disk

ABSTRACT: Put one weight on the unit circle, and take a function f, square integrable with respect to this weight. For which weights in the disk is the analytic extension of f also square integrable? If one considers the Poisson extension, the question goes back 50 years to Carleson. And in the setting of the Cauchy operator, the question has deep implications in function and operator theory.

We will survey the history, and recent solution of this question, reporting on work of the speaker, and Sawyer, Uriate-Tuero, C-Y Shen, and Wick.

Monday, March 10, 2014
Lecture at 4:00 pm
Coffee, tea, and refreshments from 3:40 pm
Room 617, Wachman Hall
Department of Mathematics