

APPLIED MATHEMATICS COLLOQUIUM

Impossibility of Approximating Analytic Functions from Equispaced Samples

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Abstract:

It is shown that no stable procedure for approximating functions from equally spaced samples can converge geometrically for analytic functions. The proof combines a Bernstein inequality of 1912 with an estimate due to Coppersmith and Rivlin in 1992. In a nutshell, you can't beat Gibbs and Runge.

Monday December 14th 2009

4:30 PM

Building 4, Room 370

*Refreshments are available in Building 2, Room 290
(Math Common Room) between 3:30 – 4:30 PM*

Applied Math Colloquium: <http://math.mit.edu/amc/fall09>

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