

L^p Convergence of Series of Eigenfunctions for the Equilateral Triangle

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Abstract

The eigenfunctions of the Laplacian on a rectangle give rise to the familiar Fourier series, whose L^p convergence is well known. We will use this result to obtain L^p convergence of series of trigonometric eigenfunctions of the Dirichlet Laplacian on an equilateral triangle. Along the way we will discuss some of the limitations of the argument owing to symmetry considerations.

Time: 12 p.m, 13th October 2021

Location: B3.02

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