Pointwise Convergence Problems, Geometry, and Orthonormal Systems

Shobu Shiraki*

Abstract

The pointwise convergence problem for the Schrödinger and wave equations, originally posed by Carleson in 1980, has attracted significant attention as an important question in harmonic analysis. Over the decades, a variety of approaches have been explored, revealing a rich landscape of ideas. In this talk, let me share some recent developments, with a particular focus on results involving geometric structures, such as fractal sets, and orthonormal systems.

*PMF-MO