Analysis Seminar

A local version of Wiener's theorem on absolutely convergent Fourier series

By

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Abstract: **The well-known Wiener theorem states that if the function f is bounded away from zero on $[0, 2\pi]$ and has an absolutely convergent Fourier series expansion, then the function $1 / f$ has the same property.**

A local version of this theorem is proved without the condition of boundedness away from zero. It also extends to Dirichlet series.

Applications: 1) in the theory of quasicrystals (a new sufficient condition for the representability of a discrete measure support in Euclidean space as the union of a finite number of lattices)

2) a new sufficient condition for a discrete set in Euclidean space to be a set of coherent frequencies.

Date: Monday, November 11, 2019

Time: 14:00-15:00

Place: SA – Z18

Tea and cookies will be served after the seminar.