

Thin Sets and Convolutions

Thin Sets and Convolutions, fall 2011

Lecturer

Tom Körner (Cambridge)

Scope

Type

Advanced studies.

Abstract

We know that if we convolve a function with itself the result is smoother. But how much smoother can it be? I shall develop the the tools from Fourier analysis and probability theory which enable us to attack this problem. We shall also look at, more or less, related problems on Hausdorff dimension and sets of multiplicity.

Lectures

Weeks 37 and 38

Monday 12-14, Tuesday 14-16 and Friday 12-14 (first lecture Monday 12.9 12-14, altogether 6 lectures)

Exams

Registration

Not necessary.

Exercise groups

No exercise groups.

Additional info

For additional information of this crash course, ask Eero Saksman (eero.saksman@helsinki.fi)

<http://wiki.helsinki.fi/display/mathstat/Ajankohtaista>