Mathematics, Statistics, and Computer Science   **@ UIC**

Graduate Analysis Seminar

Oscillatory Integrals of the First Kind

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Abstract: Oscillatory integrals have been an integral part of Harmonic analysis from its conception. The Fourier transform is a ripe example of such an oscillatory integral. One main use of oscillatory integrals is to obtain decay estimates for Fourier transforms of measures on surfaces. In a sense, oscillatory integrals link geometric properties of manifolds and the harmonic analysis related to them. We will prove a few basic yet noteworthy results on the asymptotics of oscillatory integrals in 1D.

Monday, September 26 at 12:00 PM in SEO 1227