
MATHEMATICS & COMPUTER SCIENCE COLLOQUIUM



KYLE HAMBROOK

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University of Lethbridge Alumni, BSc 2009 (Math)

Friday - October 13, 2017

Room: D634

Time: 12:00 to 12:50 pm

Title: Fourier Analysis in Metric Diophantine Approximation

Abstract: I will discuss the connections between metric Diophantine approximation and the construction of measures whose Fourier transform decays as fast as possible (relative to the Hausdorff dimension of the support of the measure). Concepts like Diophantine approximation, measure, Fourier transform, and Hausdorff dimension will be explained. Some open research problems will be highlighted.

Biography: Visiting Assistant Professor (University of Rochester); Ph.D. 2015, UBC (Izabella Laba); M.Sc. 2011 UBC (Michael Bennett); B.Sc. 2009, University of Lethbridge

Awards:

NSERC Canada Graduate Scholarship Doctoral Level 2011 and Masters Level 2009
UBC Doctoral Fellowship & Li Tze Fong Memorial Fellowship 2011
Governor General's Academic Medal 2009

Research Interests include: Harmonic analysis, geometric measure theory, Diophantine approximation, analytic number theory

This talk will be accessible to undergraduates with a solid understanding of calculus.

Refreshments provided

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