

Probability measures on solenoids and induced representations

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007 Kemeny Hall, 4:00 pm
(Tea 3:30 pm 300 Kemeny Hall)

Abstract

We discuss a construction, first due to D. Dutkay and P. Jorgensen, that creates probability measures on solenoids from filter functions defined on the unit circle related to generalized wavelets. Using this construction, a representation of the Baumslag-Solitar group is obtained, and properties of the representation are related to properties of the original wavelet and filter systems. No prior knowledge of wavelets or harmonic analysis will be assumed, and the talk should be accessible to graduate students who have had a course in analysis.

This work is joint with L. Baggett, K. Merrill, and A. Ramsay.