



UNIVERSITY OF ROCHESTER

Department of Mathematics Colloquium Series

ABSTRACT

Since Chladni in 1800, mathematicians and physicists have tried to understand the shape and size of nodal lines, e.g., the patterns that sand forms when sprinkled on a vibrating drum. They are the zeros of the eigenfunctions describing the modes of vibration. The talk will explain how complex analysis can be used to determine the shapes in the high frequency limit when the billiards on the drum are ergodic.

Steve Zelditch

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***Ergodicity, Complex Numbers
and Nodal Lines***

Thursday, April 3, 4:40 p.m.

Robert B. Goergen Hall
for Biomedical Engineering and Optics
Room 109