

# Diffusion for the periodic wind-tree model

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The periodic wind-tree model is an infinite billiard in the plane with identical rectangular scatterers disposed at each integer point. We prove that independently of the size of the scatterers, generically with respect to the angle, the polynomial diffusion rate in this billiard is  $2/3$ .

Comments: 30 pages, 8 figures; enhanced introduction

Subjects: **Dynamical Systems (math.DS)**; Mathematical Physics (math-ph)

MSC classes: 30F30, 37E35, 37A40

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