



Lehrstuhl für Analysis und Modellierung

**Lehrstuhl-Seminar
Sommersemester
2021**

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**Using Random Walks to Establish
Wavelike Behavior in an FPUT System
with Random Coefficients**

**17. Juni 2021 - 16:00
WebEx Meeting**

Abstract: We consider a linear Fermi-Pasta-Ulam-Tsingou lattice with random spatially varying material coefficients. Using the methods of stochastic homogenization, we study how solutions with long wave initial data are approximated well by a wave equation in a relative sense. The approximations are almost sure and in mean, and the talk will focus on the role results from probability theory, such as the law of iterated logs, play in the estimates.