



复旦大学数学科学学院

数学综合报告会

报告题目: Multiplicative Jensen's formula and quantitative global theory for one-frequency Schrödinger operators

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报告摘要:

We explore Avila's global theory for one-frequency Schrödinger operators from the point of view of Aubry duality. We establish the one-to-one correspondence between the Lyapunov exponent of the Schrödinger cocycles and the Lyapunov exponents of its dual cocycles. We also give a new equivalent definition of subcritical, critical, supercritical regimes. Especially, we prove that the acceleration of the Schrödinger cocycle equals to the pair of zero Lyapunov exponents of its dual cocycle. Finally, we talk about its physical application.

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