

המחלקה למתמטיקה, בן-גוריון

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## קולוקוויום

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ביום שלישי, 16 במאי, 2023

בשעה 14:30 – 15:30

ב-101 Math

ההרצאה

### **Almost the of properties abominable the On frequencies Liouville with Operator Mathieu**

חינתן על-ידי

London) of University Mary (Queen Shamis Mira

תקציר: This talk is devoted to the study of some spectral properties of the Mathieu operator (Almost Mathieu Operator) with a discrete one-dimensional Schrödinger operator generated by a potential with an irrational rotation angle  $\alpha$  (called  $\alpha$ -Liouville frequencies). The spectral properties of the Mathieu operator depend sensitively on the frequency  $\alpha$ . If  $\alpha$  is a Liouville frequency, the spectral properties are as nice as those of the rational case, but they are poorly approximated by the well-approximated case. The focus of this talk will be on complementary spectral properties that show different states in frequencies, which are completely different. We will discuss several cases in which the spectral characteristics of the Mathieu operator are as poor as those of the Schrödinger operator.

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(for logarithmic than better no be may measure) spectral averaged the of is,  
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Zhou Q. and Last, Y. Avila, A. with work joint on Based