İSTANBUL ANALYSIS SEMINARS

Spectral Gaps of Periodic One-Dimensional Schrödinger and Dirac Operators

Plamen Djakov Sabancı University

The spectra of Schrödinger and Dirac operators with periodic potentials on the real line have a band structure, i.e., the intervals of continuous spectrum alternate with spectral gaps. The sizes of these gaps decay, and the rate of decay depends on the smoothness of the potential. In this talk we give a survey of some recent results about the relationship between the decay rate of spectral gaps and the smoothness of the potential.

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Sketch of Karaköy İletişim Merkezi