東北大学大学院情報科学研究科 純粋・応用数学研究センター

情報数理談話会のお知らせ

日 時: 2014年5月28日(水) 16:00 — 17:00

(15:40より会場にお茶を用意しております)

場 所: 東北大学大学院情報科学研究科棟2階大講義室

講演者: Andrea Sacchetti 氏

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題 目: Quantum resonances: general methods and the Stark-

Wannier resonances

[概 要] The method of complex scaling, introduced by the seminal papers of Aguilar, Balslev and Combes in the '70, has become a powerful tool in both analytical and numerical studies of quantum resonances. These authors applied their ideas to spectral analysis, where resonances are defined as complex eigenvalues of a non-self-adjoint operator. In this colloquium I briefly introduce the notion of complex scaling methods and I pick out some aspects. Then I discuss with some details the case of the quantum resonances, usually named Stark-Wannier resonances, for one-dimensional Schrödinger operators with smooth periodic potential and small external homogeneous electric field.

ホームページ: http://www.math.is.tohoku.ac.jp/research/colloquium.html