

SPEAKER:

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TITLE:

The Wegner and Minami Estimates in the Anderson Model

ABSTRACT:

The Wegner and Minami Estimates are fundamental results in the theory of random Anderson Schrodinger Operators on the Hilbert space of square-summable functions on the square lattice in d -dimensions. If we restrict the random Schrodinger operator to a finite volume box in the d -dimensional square lattice, then the Wegner and Minami Estimates are upper bounds on the probability that eigenvalues of the restricted operator lie in an interval I . The bounds on these probabilities depend only on the size of the box and the length of the interval. We will discuss the technique of spectral averaging and how this can be used to prove both the Wegner and Minami Estimates, as well as its generalizations.