

abstract

ANALYSIS/MATHEMATICAL PHYSICS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

Band matrices are a class of random operators with rows and columns indexed by elements of the d -dimensional lattice, and random entries $H(u, v)$ which are small when the distance between u and v on the lattice is larger than W . We shall discuss the spectral properties of these matrices for large W .

In particular, we shall try to explain how a perturbation expansion can be applied at the edge of the spectrum, and why does the analogous series for the bulk of the spectrum diverge. Time permitting, we shall introduce a regularisation procedure which may help improve the convergence.