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40506-0027. *Spectral statistics for random Schrödinger operators.*

Random Schrödinger operators in three or more dimensions are expected to exhibit a localization-delocalization transition at weak disorder at some energy. One way to detect this transition is through the local eigenvalue statistics. In the localized phase, it is known that these are described by a compound Poisson point processes. It is anticipated that the local eigenvalue statistics in the delocalized phase are similar those of the Gaussian orthogonal ensemble in random matrix theory. Presently, this transition in local eigenvalue statistics can be proved in two models: the random decaying model and the scaled disorder model. Recent results on random Schrödinger operators in the localized phase, joint with M. Krishna, and on these two models, joint with F. Klopp, will be presented. (Received February 24, 2017)