1057-82-230 Abel Klein* (aklein@uci.edu), University of California, Irvine, Department of Mathematics, Irvine, CA 92697-3875. Poisson Statistics for Eigenvalues of Continuum Random Schrödinger Operators.

We show absence of energy levels repulsion for the eigenvalues of random Schrödinger operators in the continuum. We prove that, in the localization region at the bottom of the spectrum, the properly rescaled eigenvalues of a continuum Anderson Hamiltonian are distributed as a Poisson point process with intensity measure given by the density of states. We also obtain simplicity of the eigenvalues.

The key ingredient is a proof of Minami's estimate for random Schrödinger operators in the continuum. We will discuss the new local Wegner estimates used in this proof.

This is joint work with J.-M. Combes and F. Germinet. (Received January 23, 2010)