

1154-82-2566

**Benjamin Brodie\*** ([benjamin.brodie@uky.edu](mailto:benjamin.brodie@uky.edu)) and **Peter Hislop**. *Density of States and Eigenvalue Statistics for Fixed Width Random Band Matrix*. Preliminary report.

We prove that the local eigenvalue statistics for  $d = 1$  random band matrices with fixed bandwidth and Gaussian entries is given by a Poisson point process. The proof relies on localization bounds of Schenker and the Wegner and Minami estimates in Peled, Schenker, Shamis, and Sodin. The new component is a proof of the pointwise convergence of the density of states. The method of proof simplifies and extends some ideas used by Dolai, Krishna, and Mallick, who proved regularity results for the density of states for random Schrodinger operators. (Received September 17, 2019)