1057-81-295

Eman Hamza (eman.hamza07@gmail.com), Physics Department, Cairo, Egypt, Robert Sims* (rsims@math.arizona.edu), Department of Mathematics, 617 N. Santa Rita Avenue, Tucson, AZ 85721, and Gunter Stolz (stolz@math.uab.edu), Department of Mathematics, Campbell Hall, 1300 University Boulevard, Birmingham, AL 35294-1170. Fractional moments for the one-dimensional continuum Anderson model.

We give a proof of dynamical localization in the form of exponential decay of spatial correlations in the time evolution for the one-dimensional continuum Anderson model via the fractional moments method. This follows via exponential decay of fractional moments of the Green function, which is shown to hold at arbitrary energy and for any single-site distribution with bounded, compactly supported density. (Received January 25, 2010)