1057-82-157 David Damanik (damanik@rice.edu), Department of Mathematics, Rice University, Houston, TX 77005, and Günter Stolz\* (stolz@uab.edu), Department of Mathematics, CH 452, University of Alabama at Birmingham, Birmingham, AL 35294-1170. A Continuum Version of the Kunz-Souillard Approach to Localization in One Dimension.

We consider continuum one-dimensional Schrödinger operators with potentials that are given by a sum of a suitable background potential and an Anderson-type potential whose single-site distribution has a continuous and compactly supported density. We prove exponential decay of the expectation of the finite volume correlators, uniform in any compact energy region, and deduce from this dynamical and spectral localization. The proofs implement a continuum analog of the method Kunz and Souillard developed in 1980 to study discrete one-dimensional Schrödinger operators with potentials of the form background plus random. (Received January 20, 2010)