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David Hasler* (dghasler@gmail.com), Department of Mathematics, College of William & Mary, P.O. Box 8795, Williamsburg, VA 23187, and Richard Froese and Wolfgang Spitzer. On the AC spectrum of one-dimensional random Schroedinger operators with matrix-valued potentials.

We consider discrete one-dimensional random Schroedinger operators with decaying matrix-valued, independent potentials. We show that if the l^2 -norm of this potential has finite expectation value with respect to the product measure then almost surely the Schroedinger operator has an interval of purely absolutely continuous (ac) spectrum. We apply this result to Schroedinger operators on a strip. This work provides a new proof and generalizes a result obtained by Delyon, Simon, and Souillard. (Received January 26, 2010)