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Scaling of Greenwood Peierls conductance on a diluted square lattice WILLIAM SCHWALM, ALBERT SCHMITZ, Univ of North Dakota — The modified rectangle lattice of Dhar is a bond-diluted square lattice. The structure is self-similar and finitely ramified, like a fractal. Nevertheless certain discrete Schrödinger equation Green functions for the modified rectangle are known in closed form in the infinite lattice limit and the spectrum is continuous. By standard transfer matrix renormalization methods we present a study scaling properties of the Greenwood Peierls conductance distribution across the lattice with one dimensional lead wires attached as a function of lattice size and of additional disorder of several types.

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