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michael m.g. goldstein* (gold@math.toronto.edu), Dept. of Mathematics, University of Toronto, Toronto, Ontario M5S 1A1, Canada. *Estimate for the exterior power of the resolvent of Anderson model in a quasi-one-dimensional domain.*

We consider the Schrödinger operator of the Anderson model

$$[H_\Lambda \psi](n) := \Delta_\Lambda \psi(n) + v_n \psi_n, v = (v_n)$$

in a quasi-one-dimensional domain $\Lambda = [1, N] \times [1, K] \subset \mathbb{Z}^2$, $K \leq N^\delta$, $\delta \ll 1$, with Dirichlet boundary condition on $\partial\Lambda$. We assume that x_n are i.i.d and the common distribution $dP_0(v_0)$ has a bounded density. We consider the exterior K -th power $\bigwedge^K (H_\Lambda(v) - E)^{-1}$ of the resolvent $(H_\Lambda(v) - E)^{-1}$. Let $\alpha_l = (x_{1,l}, \dots, x_{K,l})$, $\alpha_r = (x_{1,r}, \dots, x_{K,r})$, where $x_{1,l} = (1, 1), \dots, x_{K,l} = (1, K)$, $x_{1,r} = (N, 1), \dots, x_{K,r} = (N, K)$. Then there exists $\gamma_0 > 0$ such that with probability $\geq 1 - \exp(-N^{1/2})$ holds

$$\left| \bigwedge^K (H_\Lambda(v) - E)^{-1}(\alpha_l, \alpha_r) \right| < \exp(-\gamma_0 N) \tag{1}$$

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