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# OPERATOR ESTIMATES FOR WILDLY PERTURBED MANIFOLDS

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We show norm resolvent convergence for the Laplacian on a family of domains with many small holes taken out. The critical parameter here is the capacity of the small holes. If the density of holes is below the critical parameter, then the limit operator is the free Laplacian, in the critical case, an extra potential term appears. The proof relies on an abstract convergence scheme for operators acting in varying Hilbert spaces.