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Roberto Peirone* (peirone@mat.uniroma2.it), Università di Roma Tor Vergata, Dipartimento di Matematica, via della Ricerca Scientifica, 00133 Roma, Italy. *A Method using Perron-Frobenius Theory in Problems concerning Dirichlet Forms on Fractals.*

I show the use of Perron-Frobenius Theory for Dirichlet Forms in finitely ramified fractals. In particular, this permits us to prove that if the renormalization operator Λ has an eigenform, then the sequence of its powers, renormalized, is convergent. This also permits us to prove the uniqueness (up to a multiplicative constant) of the eigenform in many fractals, and a result of pointwise convergence of the discrete forms on the n -grids to a continuous form on all of the fractal. (Received September 02, 2006)