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Dirichlet forms on Laakso Spaces.

We show how to construct Laakso spaces as projective limits of quantum graphs. Then using this construction we put a Dirichlet form on the Laakso spaces using a Laplacian corresponding very closely to the usual Laplacian (second differentiation). This Laplacian has a well understood spectrum which will also be given. (Received September 21, 2009)