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Britta Daudert* (britta@math.ucr.edu), Department of Mathematics 057, Riverside, CA 92521-0135. *Localization on Snowflake Domains.*

The geometric features of the square and triadic Koch snowflake drums are compared using a position entropy defined on the grid points of the discretizations (prefractals) of the two domains. Weighted graphs using the geometric quantities are created and random walks on the two prefractals are performed with the aim to understand if the existence of narrow channels in the domain may cause 'localization' of eigenfunctions. (Received March 01, 2006)