Benjamin Steinhurst*, Department of Mathematics, Cornell University, Ithaca, NY 14850.

Uniqueness of Locally Symmetric Brownian Motion on Laakso Spaces.

Barlow, Bass, Kumagai, and Teplyaev have recently shown (2010) that diffusions on generalized Sierpinski carpets that respect all of the local symmetries of the carpets are all equivalent up to time change. We extend their results to Laakso spaces having a similar cell structure to Sierpinski carpets but with not necessary scale invariance. In this situation explicit resistance estimates have been replaced with exit time estimates derived directly from the cell structure of the Laakso spaces. (Received August 10, 2010)