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Judith A. Packer* (packer@colorado.edu), Department of Mathematics, University of Colorado, Boulder, CB 395, Boulder, CO 80309-0395. *Wavelets and frames associated to representations of higher-rank graph algebras*. Preliminary report.

Here we discuss notions of wavelets and frames defined on L^2 -spaces for fractal-like sets associated to certain representations of higher-rank graph C^* -algebras, where the graphs in question are finite and strongly connected. We generalize work of M. Marcolli and A. Paolucci for Cuntz-Krieger C^* -algebras and obtain the wavelets and frames using the isometries and partial isometries that generate the C^* -algebras in question. This work is joint with C. Farsi, E. Gillaspy, and S. Kang. (Received February 22, 2016)