1125-46-2978   **Judith A. Packer*** (`packer@euclid.colorado.edu`), Department of Mathematics, CB 395, University of Colorado, Boulder, Boulder, CO 80309-0395. *Wavelets associated to representations of higher-rank graph algebras.* Preliminary report.

Here we discuss notions of wavelets 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 using the isometries and partial isometries that generate the C^*-algebras in question and discuss some related spectral triples. This work is joint with C. Farsi, E. Gillaspy, A. Julien, and S. Kang. (Received September 20, 2016)