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**Danny Wray Crytser\***, danny@math.dartmouth.edu. *Continuous-trace graph  $C^*$ -algebras*. Preliminary report.

A theorem of Muhly, Renault, and Williams give necessary and sufficient conditions for the  $C^*$ -algebra of a locally compact, second countable, Hausdorff groupoid with abelian stabilizers and Haar system to have continuous trace. As the Cuntz-Krieger graph algebras of row-finite graphs without sources are isomorphic to the  $C^*$ -algebras of naturally defined path groupoids, we seek to translate the groupoid conditions of their theorem to conditions on such a graph which ensure that the associated  $C^*$ -algebra has continuous trace. A result of Goehle characterizes those graphs which possess Hausdorff spectrum, and we use this characterization along with two finiteness notions for graphs, path-finiteness and finite ancestry, to characterize the graphs that have continuous-trace  $C^*$ -algebras. (Received September 16, 2013)