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Cynthia Farthing* (CynthiaFarthing@creighton.edu), Department of Mathematics, 2500
California Plaza, Omaha, NE 68178. *Desingularization technique for higher-rank graphs.*

Given a higher-rank graph Λ , it is possible to construct a higher-rank graph $\overline{\Lambda}$ that has no sources and contains Λ as a subgraph. Furthermore, if Λ is row-finite, then the C^* -algebra associated to $\overline{\Lambda}$ is Morita equivalent to the C^* -algebra of the original graph Λ .

In this talk, we will outline the process used to remove sources from higher-rank graphs and discuss some applications where removing sources is useful. We will also discuss infinite receivers in k -graphs and any progress made on desingularizing these vertices. (Received September 18, 2009)