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Rachelle DeCoste* (decoste_rachelle@wheatoncollege.edu), 26 East Main Street, Norton, MA 02766, and **Lisa DeMeyer**, **Meera Mainkar** and **Allie Ray**. *Properties of 2-step nilpotent Lie groups associated with graphs.*

In 2005 Dani and Mainkar introduced 2-step nilpotent Lie algebras associated to simple directed graphs. Ray introduced a construction of 2-step nilpotent Lie groups associated to non-simple directed graphs in 2015. Recent joint work has focused on studying properties of metric Lie algebras associated to graphs, including singularity and the presence of a Euclidean de Rham factor. We explore differences in the two constructions and discuss complications that arise when multigraphs are allowed. (Received September 17, 2017)