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Michael Hartglass* (mhartglass@scu.edu), Department of Mathematics and Computer Science, 500 El Camino Real, Santa Clara, CA 95053-0290, and **Brent Nelson**. *Type III factors arising from graphs, and a connection to infinite-index subfactors.*

We associate a von Neumann algebra associated to a weighted graph, and, give necessary and sufficient conditions on factorality and its type. We will then focus on the case where type III factors are obtained, (in which case, the factor in question will always be a free Araki-Woods factor), and we will present an application of our work to some specific infinite-index subfactors studied by Dave Penneys and Corey Jones. This is joint work with Brent Nelson. (Received February 11, 2018)