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Juhee Cho, Donggyu Kim, Yilin Zhang, Song Wang, Thu Le and Karl Rohe*
(karlrohe@stat.wisc.edu). *Spectral clustering is dead! Long live spectral clustering!*

In many empirical settings, spectral clustering finds small and uninteresting clusters, e.g. 10 node clusters in 100k node graphs. Using a very simple model, we (i) explain this phenomenon and (ii) show why perturbed and regularized spectral clustering correct this issue. (Received September 25, 2017)