1125-52-525 **Jon Lee*** (jonxlee@umich.edu). Volume-based comparison for some polytopes arising in optimization.

We look at using volume as a measure for comparing polytopal relaxations of some nonlinear sets that naturally arise in the spatial branch-and-bound approach to global optimization. By getting closed formulae for the volumes of various parametric families of relaxations, we give guidance for algorithm developers and users. This is joint work with Emily Speakman. (Received September 05, 2016)