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Alicia Dickenstein, **Mercedes Perez Millan** and **Anne Shiu**, College Station, TX 77840, and **Xiaoxian Tang***, 2250 Dartmouth St, Apt 313a, College Station, TX 77840. *Investigating multistationarity in structured reaction networks.*

Many dynamical systems arising in chemical reaction networks exhibit multistationarity (2 or more positive steady states), but it is non-trivial to find the witness. Even for a reaction network already known to admit multiple steady states. Here, we present a heuristic method for investigating this problem for some structured networks, which are common in biological signaling pathways. We demonstrate in several examples that our approach works well, and develop the associated mathematics. (Received July 18, 2017)