1163-14-498 Michael Burr, Frank Sottile and Elise Walker* (walkere@math.tamu.edu). Numerical homotopies from Khovanskii bases.

Homotopies are useful numerical methods for solving systems of polynomial equations. Embedded toric degenerations are one source for homotopy algorithms. In particular, if a projective variety has a toric degeneration, then linear sections of that variety can be optimally computed using the polyhedral homotopy. Any variety whose coordinate ring has a finite Khovanskii basis is known to have a toric degeneration. We provide embeddings for this Khovanskii toric degeneration to compute general linear sections of the variety. This is joint work with Michael Burr and Frank Sottile. (Received September 08, 2020)