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Nathan Bliss* (nbliss2@uic.edu), Mathematics & Comp Sci MC 249, 851 S Morgan St, Chicago, IL 60607, and **Jan Verschelde**. *A Symbolic-Numeric Method for Higher-Dimensional Newton-Puiseux Expansions*.

The Newton-Puiseux algorithm in two dimensions can be viewed as a special case of the fundamental theorem of tropical algebraic geometry. We examine the question of the algorithm's generalization to higher dimensions, highlighting possible optimizations of the polyhedral portion of the algorithm. We then demonstrate a symbolic-numeric Newton-Puiseux method for space curves in any dimension. (Received August 11, 2015)