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**Serkan Hosten\*** ([serkan@math.sfsu.edu](mailto:serkan@math.sfsu.edu)), Department of Mathematics, 1600 Holloway Avenue, San Francisco, CA 94132, and **Joseph Gubeladze**. *A computational study for the quadratic generation conjecture for smooth projective toric varieties*. Preliminary report.

It has been conjectured that every embedding of a smooth projective toric variety is defined by an ideal generated by quadratic binomials. In this work we tested this conjecture on a very large set of randomly generated instances which vary in dimension and the embedding dimension of the variety. We will report on the strategies we used to generate such instances, including fast methods of resolution of singularities, as well as various ways of checking the quadratic generation. (Received September 28, 2005)