1139-14-532 **Carlos Amendola**, **Nathan Bliss**, **Isaac Burke**, **Courtney R. Gibbons**, **Martin Helmer**, **Serkan Hosten**, **Evan D. Nash** and **Jose Israel Rodriguez***, Department of Statistics, George Herbert Jones Laboratory, 5747 S. Ellis, Chicago, IL 60637, and **Daniel Smolkin**. *The Maximum Likelihood Degree of Toric Varieties.*

The maximum likelihood degree is the number of complex critical points of the likelihood function on a projective variety. A wide class of such varieties is provided by hierarchical log-linear models and graphical models, a subclass of toric varieties. We will show how to compute the maximum likelihood degree of these models and exhibit examples. (Received February 19, 2018)