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Jan Draisma, **Rob Eggermont** and **Robert Krone*** (krone@math.gatech.edu), Georgia Tech - School of Math, 686 Cherry Street, Atlanta, GA 30309, and **Anton Leykin**. *Finite generation of symmetric toric ideals*.

Given a family of ideals which are symmetric under some group action on the variables, a natural question to ask is whether the generating set stabilizes up to symmetry as the number of variables tends to infinity. We answer this in the affirmative for a broad class of toric ideals, settling several open questions in work by Aschenbrenner-Hillar, Hillar-Sullivant, and Hillar-Martin del Campo. Our approach involves splitting an equivariant monomial map into a part for which we have an explicit degree bound of the kernel, and a part for which we can prove that the source, a so-called matching monoid, is equivariantly Noetherian. The proof makes use of matchings on bipartite graphs and well-partial orders. (Received September 02, 2014)