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Kaie Kubjas* (kaie.kubjas@gmail.com) and **Dimitra Kosta**. *Maximum likelihood geometry for group-based phylogenetic models*. Preliminary report.

Based on Matsen's work on inequalities for group-based phylogenetic models in Fourier coordinates, we study polynomial equations and inequalities that cut out group-based models in original coordinates. Moreover, we investigate the maximum likelihood (ML) degree of group-based models in small instances. Besides the ML degree of the interior of the model, we also look at the ML degrees of boundary components. This talk is based on joint work with Dimitra Kosta. (Received September 19, 2016)