1167-14-133Carlos Améndola, Kathlén Kohn, Philipp Reichenbach* (reichenbach@tu-berlin.de)and Anna Seigal. Invariant Theory for Maximum Likelihood Estimation.

In this talk we connect two seemingly distant fields of mathematics: invariant theory and (algebraic) statistics. More precisely, we provide a dictionary between stability notions for a group action on tensors to notions in maximum likelihood estimation for tensor normal models. For this, we give a gentle introduction to both fields and state the main result. Furthermore, we point out important applications and results building on these connections. The talk is based on joint work with Carlos Améndola, Kathlén Kohn and Anna Seigal, see arXiv:2003.13662. (Received March 03, 2021)