1167-15-234 **Harm Derksen***, ha.derksen@northeastern.edu, and **Visu Makam** and **Michael Walter**.
*Maximum Likelihood Estimation for Matrix and Tensor Normal Models.*

For matrix normal models and tensor normal models we will discuss how many samples are needed such that: (1) the likelihood function is bounded from above, (2) maximum likelihood estimates (MLEs) exist, and (3) MLEs exist uniquely. Our techniques are based on invariant theory, the representation theory of quivers and the castling transform for tensors. (Received March 08, 2021)