

1145-VL-2334      **Jamie Peabody\*** (jpeabody@ksu.edu). *GIT Fan for Mori Dream Spaces*. Preliminary report.

A Mori Dream Space is naturally a GIT quotient of an affine variety by an algebraic torus. Such a GIT quotient naturally carries a combinatorial structure called the GIT fan. In the case of Mori Dream Spaces, this coincides with the Mori chamber decomposition which describes the birational contractions of the space. I will present my approach to describing the GIT fan using tropical geometry. As a result of this approach, I prove that this fan is the normal fan to an explicitly computable polytope which generalizes the result of toric geometry. (Received September 25, 2018)