1117-92-234   **Joseph Rusinko*** (`rusinko@hws.edu`). *Combinatorics of the Kimura-3 Polytope.*

The Kimura three parameter model of evolution along a tree can be described as a toric variety. We provide a facet description for the polytope associated this toric variety for any choice of a claw tree. The combinatorial structure behind these facet descriptions provide an interesting example of how applied mathematics can motivate new and interesting pure algebraic geometry. (Received January 15, 2016)