

Meeting: 1003, Atlanta, Georgia, SS 25A, AMS Special Session on Complex and Functional Analysis, I

1003-52-1715 **Michael Joswig*** (joswig@math.tu-berlin.de). *Tropical Polytopes in General*
Position. Preliminary report.

Tropical polytopes were introduced by Develin and Sturmfels as the tropical convex hulls of finitely many points. Later it had been observed that these tropical polytopes also admit an equivalent exterior description in terms of tropical halfspaces.

In this talk we show how this opens up the possibility of a combinatorial theory of tropical polytopes quite similar to what is familiar from ordinary convex polytopes. This similarity is particularly striking if the vertices of the tropical polytope are in general position. (Received October 13, 2004)