1172-13-85 **Ayah Almousa*** (aka66@cornell.edu), **Anton Dochtermann** and **Benjamin Smith**. *Root polytopes, tropical types, and toric edge ideals.* Preliminary report.

We explore generic tropical hyperplane arrangements where some of the apices of the tropical hyperplanes are "taken to infinity". We show that the resulting bounded complex gives rise to a cellular resolution for an ideal that is Alexander dual to the Stanley-Reisner ideal of a regular triangulation of a (type A) root polytope. Moreover, the Stanley-Reisner ideal of this triangulation can be seen as a squarefree initial ideal of a toric edge ideal; this key observation yields a new approach to studying homological aspects of toric edge ideals. (Received August 18, 2021)