

---

**FARBOD SHOKRIEH**, Cornell University  
*Faithful Tropicalization of Abelian Varieties*

We study faithful tropicalization of abelian varieties. For an abelian variety, the skeleton (in the sense of Berkovich) is a real torus with an "integral structure. For totally degenerate Jacobians, we give an explicit faithful tropicalization in terms of non-Archimedean and tropical theta functions. The solution relies on interesting combinatorial facts about lattices and Voronoi decompositions. (Ongoing joint work with Tyler Foster (University of Michigan), Joe Rabinoff (Georgia Tech), and Alejandro Soto (KU Leuven))