

## **Tropical geometry for computational algebra**

*Josephine Yu*  
*Georgia Tech*

Tropical geometry is a polyhedral analogue of algebraic geometry. Tropicalization is a process that turns an algebraic variety into a polyhedral complex, preserving some invariants. In this talk, we will see how tropical geometry can be used to do some computations in commutative algebra, in particular, elimination, implicitization, and the computation of discriminants and resultants.