

ALGEBRA  
SEMINAR

*Tropical dual varieties*

Yoav Len  
Georgia Tech

**Abstract:** My talk will revolve around combinatorial aspects of dual varieties. I will introduce the tropical dual variety, which similarly to the algebraic case, classifies tangent hyperplanes to a given variety. The construction commutes with tropicalization, and the resulting object is indeed a tropical variety. Consequently, we obtain a combinatorial tool for counting multi-tangent hyperplanes to algebraic varieties, detecting dual defects, and for computing Newton polygons of dual varieties.

Tuesday, September 4, 2018, 4:00 pm  
Mathematics and Science Center: W301

MATHEMATICS AND COMPUTER SCIENCE  
EMORY UNIVERSITY