## **ROBERT WILLIAMS**, Texas A&M University

Minkowski sums of algebraic varieties

The Minkowski sum is a classical operation, and the sum of two polytopes is a well-known construction. This talk will focus on applying the Minkowski sum to a more geometrically diverse class of objects- algebraic varieties. Unlike with convex bodies, the sum of two algebraic varieties is not necessarily a variety. We will explore the conditions under which Minkowski sum respects Zariski closure as well as when it is well behaved with respect to the dimension and degree of the varieties.