

## Algebraic K-Theory Seminar

*Commutative algebra of categories*

John Berman (University of Virginia)

**Abstract:** Many familiar categories themselves have ring structures, with a multiplicative operation distributing over an additive operation. In  $\text{Set}$ , Cartesian product distributes over disjoint union, while in  $\text{Vect}$ , tensor product distributes over direct sum. The commutative algebra and algebraic geometry of these ring categories provides a natural home for both the study of algebraic theories (such as Lawvere theories and operads), as well as higher algebraic K-theory. Time permitting, we will mention some intended applications to equivariant homotopy theory.

Wednesday, October 4 at 10:30 AM in SEO 1227