

**Speaker:** Elden Elmanto

**Title:** On the motivic cohomology of schemes

**Abstract:** I will report on joint work with Matthew Morrow. Using ideas from topological cyclic homology and  $p$ -adic Hodge theory, we construct a theory of  $p$ -adic motivic complexes for any qcqs scheme in characteristic  $p$ . This can be viewed as a generalization of algebraic cycles to singular, possibly nonreduced, schemes. A key result is an agreement of this construction with Bloch cycle complexes on smooth varieties which, time permitting, I will explain a proof of.