

**Speaker:** Dmitry Kaledin

**Title:** Bokstedt periodicity and Bott periodicity

**Abstract:** Topological Hochschild Homology, while originally defined by topologists, has recently started turning up in many purely algebraic situations. This is especially true for algebras over a finite field  $\mathbb{F}_p$ , due to a sort of a miracle:  $\mathrm{THH}(\mathbb{F}_p)$  is extremely simple, it is just the algebra of polynomials in one variable of degree 2. However, the existing proofs of this fact are not simple at all. I will present yet another proof that uses quite a few additional general structures THH is known to have (to wit, multiplication and a trace functor structure), but almost nothing specific to  $\mathbb{F}_p$ .