1069-19-272   **Vigleik Angeltveit*** (`vigleik@math.uchicago.edu`), **Teena Gerhardt**, **Michael Hill** and **Ayelet Lindenstrauss**. *Cyclotomic spectra and K-theory of truncated polynomial algebras.* Preliminary report.

We study the algebraic K-theory of a truncated polynomial algebra of the form $A = k[x_1, \ldots, x_n]/(x_i^{a_i})$ by using the cyclotomic trace map from algebraic K-theory to topological cyclic homology. Topological cyclic homology is constructed from topological Hochschild homology, and the main innovation is to write the topological Hochschild homology spectrum $THH(A)$ as the iterated homotopy pushout of an n-cube of *cyclotomic spectra*. It follows that topological cyclic homology of A is the iterated pushout of a corresponding n-cube, where each term can be evaluated easily. In particular this determines the algebraic K-theory of $\mathbb{F}_p[x_1, \ldots, x_n]/(x_i^{a_i})$ whenever p does not divide any of the a_i. (Received January 24, 2011)

1