1106-55-2045Vigleik Angeltveit and Teena Gerhardt* (teena@math.msu.edu). Computations in Algebraic
K-Theory.

Abstract: In general algebraic K-theory groups are difficult to compute, but in recent years methods in equivariant stable homotopy theory have made some computations more accessible. Using these methods to compute the algebraic K-theory of pointed monoid algebras is particularly interesting, as the full power of equivariant homotopy groups is used. I will recall some successes of these methods and describe how equivariant techniques contribute to a new strategy for answering a classical computational question. In particular, I will discuss a new approach to computing the algebraic K-theory of the group ring $\mathbb{Z}[C_2]$. (Received September 15, 2014)