

1155-55-473

Dominic Culver* (dculver@illinois.edu), Urbana, IL 61801, and **JD Quigley**. *On the \mathbb{C} -motivic Adams spectral sequence based on Hermitian K-theory.*

In the 1980s, Mahowald initiated the study of the Adams spectral sequence based on connective real K-theory. Using this spectral sequence, he was able to give a complete description of all of the so-called v_1 -periodic elements in the stable homotopy groups of spheres. In this talk, I will describe joint work with JD Quigley where we developed Mahowald's program for \mathbb{C} -motivic spectra. In particular, I will describe our calculation of the v_1 -periodic elements in the stable homotopy groups of the \mathbb{C} -motivic sphere. Given time, I will pose a motivic analog of the telescope conjecture. (Received January 20, 2020)