1052-55-343   **Michael Hill*** (`mikehill@virginia.edu`), **Michael Hopkins** (`mjh@math.harvard.edu`) and **Douglas Ravenel** (`doug+pi@math.rochester.edu`). *Non-existence of Kervaire invariant one elements and a homotopy fixed point spectral sequence.*

In recent work, a certain homotopy fixed point spectral sequence was used to resolve the long-standing question of the existence of Kervaire invariant one elements of high degree. The talk will focus upon the relevant equivariant E-infinity ring spectrum and on using its homotopy fixed point spectral sequence to recover information from the Adams-Novikov spectral sequence. (Received September 01, 2009)