

1014-55-1121      **F John Carter\*** (Jcarter@noether.uoregon.edu), 34 N. Adams, Eugene, OR 97402. *The Eilenberg-Moore spectral sequence for Morava K-theory*. Preliminary report.

In this talk I will discuss the convergence of the Morava K-theory Eilenberg-Moore spectral sequence for the path loop fibration. This spectral sequence can be constructed by applying Morava K-theory to the geometric cobar construction of the Eilenberg-Moore spectral sequence as done by Rector. For Morava K-theory I have been able to show that the Atiyah-Hirzebruch spectral sequence for  $\Omega X$  is equivalent to an inverse limit of a sequence of Atiyah-Hirzebruch spectral sequences. Using this fact I have shown that the Morava K-theory Eilenberg-Moore spectral sequence converges for a space  $X$  if the Atiyah-Hirzebruch spectral sequence for  $X$  collapses at the  $E_2$  page and the Eilenberg-Moore spectral sequence collapses for ordinary homology. (Received September 27, 2005)