**Meeting:** 1005, Newark, Delaware, SS 1A, Special Session on Homotopy Theory (in Honor of Donald M. Davis's and Martin Bendersky's 60th Birthdays)

1005-55-178 Douglas C Ravenel\* (doug@math.rochester.edu), Department of Mathematics, University of Rochester, Rochester, NY 14627. *Higher chromatic generalizations of elliptic cohomology*.
One definition of elliptic cohomology begins with the formal group law (FGL) associated with an elliptic curve. It is known that the height of such a FGL can be at most 2, which means that elliptic cohomology can detect only rational, v<sub>1</sub>- and v<sub>2</sub>-periodic phenomena in stable homotopy. We will describe a way to associate 1-dimensional FGLs of greater height with certain algebraic curves and discuss the resulting cohomology theories. (Received February 08, 2005)