1142-13-153          **Youngsu Kim\*** (`yk009@uark.edu`), 850 W Dickson ST, Fayetteville, AR 72701, and **Andrew Walker**. *On the Cohen-Macaulayness of non-Noetherian rings.*

The Cohen-Macaulayness of rings and modules is one of the most desired properties in commutative algebra and algebraic geometry. The definition for the Noetherian case, the depth of the module is equal to the dimension of the module, does not extend well to the non-Noehterian case. Under this definition, important classes of non-Noetherian rings, for instance, valuation rings, are not Cohen-Macaulay.

There have been several attempts to extend the definition of Cohen-Macaulay to the non-Noetherian case. We will talk about the definition by Hamilton-Marley, and present a couple of results. This is joint work with A. Walker. (Received September 01, 2018)