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Lance Edward Miller* (lem016@uark.edu), SCEN, 850 W. Dickson St. #309, Fayetteville, 72701, and **Kyle Maddox**, 1460 Jayhawk Blvd, Lawrence, KS 66045. *F-nilpotent type singularities*. Preliminary report.

Singularities of local and graded rings defined by the Frobenius have a rich history with F-rational singularities being among the best behaved. Takagi and Srinivas formalized a class of singularities considered without name by Blickle and Lyubeznik called F-nilpotent singularities, defined by considering when Frobenius actions on local cohomology is nilpotent. These have been the subject of significant recent study which generalized the notion in various ways. In this talk, we will review these singularity types, their relationships, and discuss work in progress with K. Maddox concerning sufficient conditions for rings to have these types of singularities. (Received August 18, 2020)