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julia@math.washington.edu. *Support theory for Elementary supergroups*. Preliminary report.

Elementary supergroup schemes arise as a detecting family in the theory of supports for finite supergroup schemes. As such, they play a similar role to finite supergroup schemes as elementary abelian  $p$ -groups play for finite groups, as known from the classical work of Quillen and Chouinard. In this talk I'll describe the theory of varieties, the calculation of the Balmer spectrum and the Benson-Iyengar-Krause stratification for the singularity category of an elementary supergroup scheme. An interesting and novel feature of the theory is that it combines the  $\pi$ -point approach of Friedlander-Pevtsova with the hypersurface approach of Avramov-Iyengar as an attempt to construct Carlson's rank varieties in the super context. (Received March 02, 2020)