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Bethany Turner*, turnerbn2@appstate.edu. *Some Criteria for Solvable and Supersolvable Leibniz Algebras*. Preliminary report.

Leibniz algebras are generalizations of Lie algebras which are not antisymmetric. Since the introduction of Leibniz algebras in 1993 by Jean-Louis Loday, many results for Lie algebras have been generalized to the Leibniz case, such as Lie's Theorem and Engel's Theorem. Since 2008, motivated by group theory, David Towers has used several types of subalgebras to characterize solvable and supersolvable Lie algebras. Among these subalgebras are c -ideals, CAP-subalgebras and Cartan subalgebras. In this talk we introduce definitions for c -ideals and CAP-subalgebras of Leibniz algebras. We then give some characterizations of solvable and supersolvable Leibniz algebras based on the behavior of these subalgebras. (Received September 12, 2016)