Alexander A. Katz* (katza@stjohns.edu), St. John's University, SJC of LAS, Department of Mathematics & CS, 8000 Utopia Parkway, SJH-334-G, Queens, NY 11439. On the notion of Stonean *-algebras.

We introduce and study Stonean *-algebras (S*-algebras) which are essentially normed (non-commutative) complex algebras with involution "*". Its norm satisfies C*-algebra like conditions, but does not have to take just finite values. In addition, its self-adjoint part admits a partial ordering that defines a topology, generally coarser then the topology induced by the norm. In the sequel we study basic properties of theses algebras and show how they are related to von Neumann algebras, AW*-algebras and O*-algebras. (Received September 26, 2017)