1145-43-2561 **Norbert N Youmbi*** (nyoumbi@francis.edu), 117 Evergreen Dr, Loretto, PA 15931. *The Algebraic Structure of a Topological Semihypergroups.*

The theory of semihypergroup, is studied in both an algebraic and topological approach. Unlike in the group case, a topological semihypergroup, is not defined, by associating a topology to an existing algebraic structure. In the contrary, there is no algebraic structure assumed on the base space of a topological semihypergroup. In this paper, we use the convolution of measures defined on the vector space of Radon measures of a topological semihypergroup, to define an algebraic structure on the base space. We establish the fact that a topological semihypergroup is actually an algebraic semihypergroup, and establish some interesting algebraic results that could ease research on a topological semihypergroup. (Received September 25, 2018)