1067-43-1134 **Norbert N Youmbi*** (nyoumbi@francis.edu), 117 Evergreen Dr, Sullivan 114, Loretto, PA 15940. *Completely Simple Topological Semihypergroups.*

A semihypergroup S is roughly speaking a topological space that has enough structure so that a convolution could be defined on its vector space of Radon measures M(S). In contrast to topological semigroups, an algebraic operation is not defined on S, rather the convolution of measures is used to defined the possible algebraic concepts on S. We are then logically faced with the question: how much algebraic structure could be inherited from the algebra of measure of a topological semihypergroup? We address this question by proving results, essential in doing harmonic analysis and Probability on semihypergroups. In particular we define a Rees convolution product and show that it actually defines a completely simple semihypergroup. We also give examples to illustrate contrasts between semigroups and semihypergroups. (Received September 19, 2010)