1099-47-303 Hao-Wei Huang* (hwhuang@mast.queensu.ca), Kingston, Ontario K7L 3N6, Canada, and Ping Zhong (pzhong@indiana.edu), 831 E. Third St., Bloomington, IN 47405. Supports of measures in free multiplicative convolution semigroups.

In free probability, there are many cases that the number of components in a family of probability measures with parameter t is a non-increasing function of t. For instance, in 1997 Biane showed that the free convolution of any Borel probability measure on \mathbb{R} and semicircular distribution with variance t has this property. In fact, the partially defined free additive convolution semigroup generated by any Borel probability measure on \mathbb{R} has this property as well. Moreover, this non-increasing property also holds for the free multiplicative convolution of an arbitrary probability measure on the unit circle with the free multiplicative analogues of the normal distribution on the unit circle. In this talk, we will talk about our results showing that the partially defined free multiplicative convolution semigroups generated by any Borel probability measure on the unit circle and on the positive real line have the same results. This is a joint work with Ping Zhong. (Received February 10, 2014)