

1163-46-1174      **James A Mingo\*** (mingo@queensu.ca) and **Pei-Lun Tseng** (16plt@queensu.ca). *Infinitesimal Freeness and Non-commutative Functions*. Preliminary report.

Free probability has shown itself to be the probability theory of random matrices. Infinitesimal freeness is finer type of independence used to analyze spike models in random matrix theory. I will show how non-commutative functions are used to find the functional relations for infinitesimal freeness. This is joint work with Pei-Lun Tseng. (Received September 14, 2020)