1127-81-175 **Zhengwei Liu*** (zhengweiliu@fas.harvard.edu), 17 Oxford Street, Cambridge, MA 02138. *The string Fourier transform on quons.*

In recent joint work with Arthur Jaffe and Alex Wozniakowski, we introduced quon 3D language for quantum information associated with a unitary modular tensor category (MTC). In joint work with Feng Xu, we proved that the string Fourier transform (SFT) on quons is the S matrix of the MTC. I will talk about string quons defined by strings in 3-manifolds. String quons include the Greenberger-Horne-Zeilinger (GHZ), Max, and 6j-symbol states. We obtain an algebraic identity for the MTC from each pair of string quons related by the SFT. The identity from the pair of GHZ and Max generalizes the Verlinde fomula. The pair of 6j-symbol states defines a new identity between 6j-symbols and the S matrix. (Received February 02, 2017)