1120-15-67   **Jianxin Chen**, **Nathaniel Johnston**, **Chi-Kwong Li** and **Sarah Plosker***
(`ploskers@brandonu.ca`). *Some matrix theory questions arising from quantum coherence.*

The two main concepts that separate quantum information theory from classical information theory are entanglement and superpositions. Both can be used as resources and it is therefore important to measure them. Various measures of quantum entanglement have been investigated for years, but measures of coherence (i.e., "how superpositioned" a quantum state is) have only recently been formally studied. In this talk we will focus on three measures of quantum coherence, using a matrix theory point of view to answer some open questions about them. (Received February 09, 2016)