1163-46-721 **Priyanga Ganesan*** (`priyanga.g@tamu.edu`), 500 Wellborn Rd N, Apt 1203-C, College Station, TX 77840. *Quantum Graph Homomorphisms.*

Quantum graphs are an operator space generalization of classical graphs that have emerged in operator systems theory, non-commutative topology and quantum information theory. In this talk, I will review the literature on quantum graphs and introduce a notion of quantum graph homomorphisms, using a non-local game with quantum inputs and classical outputs. We will discuss how the winning strategies of the game correspond to different versions of quantum homomorphisms in the literature and lead to a unified theory. This is based on joint work with Michael Brannan and Samuel Harris. (Received September 11, 2020)