ADA CHAN, York University *Quantum isomorphism and Hadamard graphs*

In 2020, Mančinska and Roberson prove that two graphs G and H are quantum isomorphic if and only if, for any planar graph F, the number of graph homomorphisms from F to G is equal to the number of graph homomorphisms from F to H. In this talk, we discuss the use of their remarkable characterization to show that any two Hadamard graphs of the same order are quantum isomorphic, and the research questions that arise from this result.

This is joint work with Bill Martin.