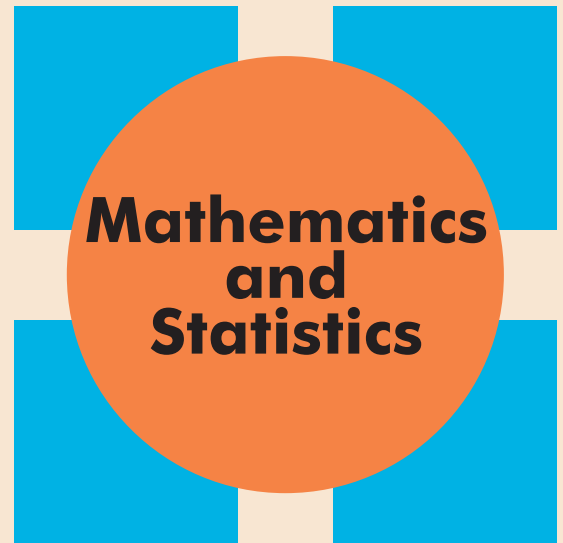


COLLOQUIUM

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Bisynchronous Games



Date: Friday October 18, 2019

Time: 3:30 - 4:30 PM

Room: RI 208

Abstract: For some games played by two cooperating but non-communicating players, the players can use entanglement as a resource to improve their outcomes beyond what is possible classically. Graph colouring game, graph homomorphism game and graph isomorphism game are a few examples of these games. Over the last few years, a remarkable progress has been taken place in the theory of these games. One significant aspect of this development is its connection with many challenging problems in operator algebras.

In this talk, I will review the theory of these games and explain the relevant connection with operator algebras. In particular, I will introduce a new class of games which is called *bisynchronous* and will show a close connection between bisynchronous games and the theory of quantum groups. This is joint work with Vern Paulsen. No background in quantum theory is needed for this talk.