

1116-VF-1377 **Carlos M Ortiz*** (cortiz@math.uh.edu) and **Vern I Paulsen** (vpaulsen@uwaterloo.ca).
Non-Local Games on Graphs: An Operator Algebraic Approach. Preliminary report.

In a non-local game, two non-communicating players cooperate to convince a referee about a strategy that does not violate the rules of the game. A quantum strategy for such a game enable players to determine their answers by performing joint measurements on a shared entangled state. In this talk we will concentrate on non-local games motivated by problems in graph theory. We will survey known results, explain why the study of such games is important, and introduce some new findings that come from the theory of operator algebras. (Received September 19, 2015)