HADI SALMASIAN, University of Ottawa

Monogamy of Entanglement Games on Unitary Groups

A Monogamy of Entanglement game (MOE) is a tripartite game in which two isolated parties (Bob and Charlie) try to predict the outcome of the measurement done by the third party (Alice) based on the information that they receive about Alice's measurement. The MOE games have recently found a number of applications, e.g. in uncloneable encryption. In this talk we will investigate MOE games in which Alice's measurement is determined by a randomly chosen point on the unitary group. Computing the winning probability thresholds of this MOE game lead to interesting questions involving the Haar measure. This talk is based on a joint work (in progress) with A. Broadbent, A. Mahmoud, and M. Nevins.