Aden O Ahmed* (aden.ahmed@tamuk.edu), Department of Mathematics MSC 172, 700 University BLVD, Kingsville, TX 78363-8202. Optimal Strategies in a Quantum Three-Player Dilemma Game.

This presentation explores an octonionic representation of the payoff function in generic three-player maximally entangled quantum games. This fresh computational framework is then utilized to identify certain family of optimal strategies in a quantized version of a three-player dilemma game. (Received September 15, 2015)