DEPING YE, Memorial University of Newfoundland *The ubiquity of Einstein's "spooky action at a distance"*

Quantum Entanglement, also called "spooky action at a distance" by Einstein, plays fundamental roles in the development of quantum information theory. The ubiquity of quantum entanglement has been a long-standing question in quantum information theory related areas. In this talk, I will present the phase transition phenomenon of quantum entanglement, in particular the threshold where the phenomenon occurs, and hence provided a solution to the long-standing question regarding the ubiquity of quantum entanglement. This talk is based on a joint work with Aubrun and Szarek (Comm. Pure Appl. Math., 2014)