THE UNIVERSITY



OF HONG KONG

Department of Mathematics



Generalized numerical ranges and quantum information science

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Abstract

Recent results on the use of generalized numerical ranges of bounded linear operators to study problems arising in quantum information science will be presented. Connection of the results to the study of unital completely positive maps from the Calkin algebra associated with a Hilbert space to matrix spaces will also be discussed.

The talk is based on joint works with Pan-Shun Lau and Nung-Sing Sze of Hong Kong Polytechnic University, Vern Paulsen of the Institute for Quantum Computing at the University of Waterloo, and Yiu-Tung Poon of Iowa State University.

Date: December 11, 2018 (Tuesday)

Time: 11:00am – 12:00noon

Venue: Room 210, Run Run Shaw Bldg., HKU

All are welcome