Department of Computer Science, The University of Hong Kong

Quantum Information Seminar

The curious capacities of quantum channels

Prof. Debbie Leung
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Department of Combinatorics and Optimization
University of Waterloo, Canada

Date:
August 9, 2019
Friday
2:00-3:00pm

Venue:
Room 308
Chow Yei Ching Building
The University of Hong Kong

Abstract:

The best asymptotic rate of a communication channel to process information (such as transmitting data or creating correlation) is called the capacity of the channel for the task involved. This talk focuses on the capacities of a quantum channel to communicate quantum or private classical data. We first summarize well known surprising results, followed by sharing a few recent developments in the subject.

About the Speaker:

Debbie Leung joined the Institute for Quantum Computing (IQC) and the Department of Combinatorics and Optimization at the University of Waterloo in 2005. She has been an associate member of the Perimeter Institute since 2019. She was a Tolman postdoctoral fellowship at the Institute for Quantum Information, Caltech, after spending four months at the Workshop on Quantum Computation, September-December 2002, at the Mathematical Sciences Research Institute, Berkeley, and a two-year stay at the Physics of Information group at the IBM TJ Watson Research Center, 2000-2002. After a BSc in Phys/Math from Caltech in 1995, she did a PhD in Physics at Stanford under the supervision of Professor Yoshihisa Yamamoto and Professor Isaac Chuang. Event website: https://qift.weebly.com/events.html

All are welcome!
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