# MATH-IMS Joint Pure Mathematics Colloquium Series
## The Chinese University of Hong Kong

*This Colloquium Series in Pure Mathematics is organized by the Department of Mathematics and the Institute of Mathematical Sciences (IMS) at The Chinese University of Hong Kong. The series focuses on all areas of pure mathematics together with theoretical developments and applications.*

**Date:** November 3, 2023 (Friday)
**Time:** 2:30PM-3:30PM (Hong Kong Time)
**Venue:** LSB 222

# Who is afraid of a quantum computer?

*Speaker: Professor Man-Duen Choi*
*University of Toronto*

**Abstract:** Suddenly, I am awaken in the new era of REAL quantum computers. I am totally surprised that some of my early results in pure mathematics have become pioneering work of Quantum Information.

This is a report of my own adventure in the quantum wonderland. In particular, I seek the sense and sensibility of quantum computers, with the pride and prejudice in matrix theory.

Note that exactly 60 years ago, I started to study mathematics in the university. May I return to the same campus to report on much ado about beautiful mind? /end

**Bio**: Professor Man-Duen Choi is a Professor Emeritus at the University of Toronto. He obtained his B.S. in Mathematics from Chung Chi College at the Chinese University of Hong Kong in 1967, and his Ph.D. from the University of Toronto in 1973. After graduation, Prof. Choi has worked at the University of California Berkeley before he joined the University of Toronto in 1976. Professor Choi's research focuses on operator theory, operator algebras and matrix theory. He has made important contributions to these areas which significantly influence the development of quantum information and quantum computing. Prof. Choi has received numerous prestigious international awards, including e.g. the Israel Halperin Prize (1980), the Coxeter-James Prize (1983) and he was elected a fellow of the Royal Society of Canada in 1985.