

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

This MATH-IMS Joint 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 focus on all areas of pure mathematics together with theoretical developments and applications.

Date: December 10, 2020 (Thursday)

Time: 8pm – 9pm (Hong Kong Time)

Zoom Link: <https://cuhk.zoom.us/j/98846779826>

**Studying $\mathbb{Z}/2$ eigenfunctions and eigenvalues of
the Laplacian on the round 2-sphere**

***Speaker: Professor Clifford Taubes
Harvard University***

Abstract: I once thought this: Certainly by the year 2020, the Laplacian on the round 2-sphere would have nothing new to offer. As it turns out, I was wrong. I will describe a sequence of eigenvector/eigenvalue problems on the 2-sphere that Yingying Wu and I are studying that take every opportunity to do the unexpected.

Bio: Prof. Taubes is William Petschek Professor of Mathematics at Harvard University. He received numerous prestigious awards including the Veblen Prize, the Elie Cartan Prize, the Shaw Prize, the Clay Research Award, the NAS (National Academy of Sciences) Award in Mathematics. He was elected as a fellow of the American Academy of Arts and Sciences and the National Academy of Sciences and was a plenary talk speaker at the ICM.