



Department of Physics  
THE UNIVERSITY OF HONG KONG

Physics  
Colloquium

# Supermassive Black Holes and Low-Frequency Gravitational Waves

March 24, 2021 (Wednesday)  
10:00 a.m.

## Zoom Online Lecture:

<https://hku.zoom.us/j/99973046894?pwd=bFpHTW51Yy9GbKpaUmQwVFJKSjNvUT09>

Meeting ID: 999 7304 6894

Password: 2859



*Professor Chung-Pei Ma*  
*University of California, Berkeley*

## Abstract:

Supermassive black holes are a fundamental component of galaxies. Residing at the centers of galaxies, these black holes have masses up to tens of billion suns and directly impact the evolution of their host galaxies. Professor Ma will describe recent progress in discovering new populations of massive black holes, and the implications for the theoretical understanding of the symbiotic relationships between black holes and galaxies. She will discuss the prospects for detecting low-frequency gravitational waves from merging binaries of supermassive black holes in the next decade.

## Biography:

Chung-Pei Ma is the Judy Chandler Webb Professor in the Physical Sciences. She received both her undergraduate and Ph.D. degrees in physics from the Massachusetts Institute of Technology. Before joining the faculty at UC Berkeley in 2002, she was a postdoctoral fellow at the California Institute of Technology and an Assistant and Associate Professor of Physics and Astronomy at the University of Pennsylvania, where she won the Lindback Award for Distinguished Teaching. Ma is an avid violin player and was an exchange student at the New England Conservatory of Music in Boston while studying cosmic strings and theoretical cosmology at MIT. She was the first prize winner in the Taiwan National Violin Competition in 1983. Ma was the cosmology scientific editor for the *Astrophysical Journal* in 2007-2017.

**Anyone interested is welcome to attend!**

Phone: 28592360 Fax: 25599152