

## THE CHINESE UNIVERSITY OF HONG KONG Department of Physics SEMINAR

## Where New Physics Will (Possibly) Emerge in Cosmology?

by

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Date: December 12, 2022 (Monday) Time: 12:00 n.n. - 1:00 p.m.

Place: Rm. 311, Science Centre North Block, CUHK

ALL INTERESTED ARE WELCOME

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## **Abstract**

The last two decades saw the fast development of precision cosmology with the advances of modern telescopes. I will give a brief overview of modern cosmology and highlight its phenomenal successes and distinctive challenges. I will explain why and how the measurements of cosmic microwave background radiation, the relics of the primordial elements, and the galaxy distribution on large scales can improve our understanding of the fundamental building blocks of nature. Then I will discuss its distinctive challenges and the observational frontiers for high-energy physics, highlighting where new physics may possibly emerge.

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