

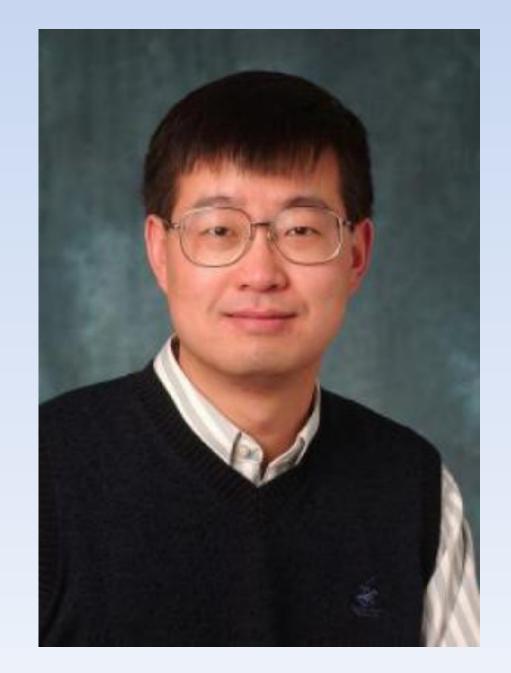
The Chinese University of Hong Kong Faculty of Science / Department of Physics

C N Yang Lecture in Physics In Honor of Professor Yang Chen Ning's 100th Birthday

## Quantum Matter, Clocks, and Fundamental Physics

## Professor Jun Ye (禁軍教授)

JILA, National Institute of Standards and Technology and University of Colorado Boulder, USA



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Date: September 24, 2022 (Saturday)

**Time:** 8:50 a.m. – 10:20 a.m.

**Zoom:** https://cuhk.zoom.us/j/97330173089

## Abstract

Precise control of quantum states of matter and innovative laser technology are revolutionizing the performance of atomic clocks and metrology, providing opportunities to explore emerging phenomena and test fundamental physics. Recent advances include measurements of the gravitation time dilation across a mm-scale atomic ensemble.

Jun Ye is a Fellow of JILA, a Fellow of NIST, and a member of the National Academy of Sciences. His research focuses on the development of new tools for light-matter interactions and their applications in precision measurement, quantum science, and frequency metrology. He has co-authored 400 scientific papers and delivered 600 invited talks. Among his many awards and honors are N.F. Ramsey Prize (APS), I.I. Rabi Award (IEEE), I.I. Rabi Prize (APS), and W.F. Meggers Award (OSA). His recent 2022 honors include Breakthrough Prize in Fundamental Physics, Niels Bohr Institute Medal of Honour, Herbert Walther Award, and Vannevar Bush Fellowship.