

# The Southern Advanced Photon Source

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**Date:** 20 November 2024 (Wednesday)

**Time:** 4:30pm-5:30pm

**Venue:** HKIAS Lecture Theatre,  
LG/F, Academic Exchange Building,  
City University of Hong Kong



The Southern Advanced Photon Source (SAPS) is a state-of-the-art synchrotron radiation facility currently in the advanced stages of planning and design, which will be the core scientific facility of Guangdong-Hong Kong-Macao Greater Bay Area National Science and Technology Center. The combination of neutrons from China Spallation Neutron Source (CSNS) and X-rays from SAPS will offer complementary advantages in research methods, enabling advancements in various fields such as quantum systems, energy materials, and nanomedical materials. The SAPS project not only addresses frontier scientific research but also supports development of high-tech industries, covering areas such as high-performance chips, batteries, materials, and biomedicine. Synchrotron radiation light source is a standard configuration in the internationally famous Bay Areas.

SAPS plans to construct a 4th generation medium-energy photon source with an beam energy of 3.5 GeV. By employing advanced technologies, SAPS will provide world-leading performance X-rays. In this presentation, the latest progress of the project will be discussed, including the design of the accelerator and beam lines, the selection of 10 beamlines and experimental stations for the Phase-I, and R&D on key technologies. We suggested that SAPS will be hosted jointly by Guangdong Province Government, Hong Kong and Macau, and become a flagship facility of Greater Bay Area National Science and Technology Center.



Registration:  
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