



# Push femtosecond laser to extreme light for attosecond generation

**Date:** April 3, 2024 (Wednesday)

**Time:** 5:00 p.m.

**Venue:** CYPP2, LG1/F, Chong Yuet Ming Physics Building, Main Campus, HKU



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*The Institute of Physics, Chinese Academy of Sciences*

**Abstract:** With the remarkable progresses in ultrafast laser technology, not only the laser power has broken 10 PW based on Chirped Pulse Amplification (CPA), but the duration was also pushed to attosecond scale, both won the Noble prize in physics in 2018 and 2023 respectively. To pursuit extreme light pulse and trigger the emerging applications in ultrafast dynamics, high field physics etc, we developed a series of ultrafast laser technologies such as generation of few cycles laser pulses, amplification of high power femtosecond lasers and frequency conversion toward infrared and XUV. Pulse duration shorter than 86 as was obtained from our extreme laser facilities. In this talk I will give a brief introduction for the results and facilities.

**Biography:** Zhiyi Wei obtained Ph.D in 1991 at Xi'an Institute of Optics and Precision Mechanics. He joined in the Institute of Physics, Chinese Academy of Sciences since 1997 and was prompted as professor in 1999. He has been working on ultrafast laser since 1984. From 1993 to 2002, he has worked at the Rutherford Appleton Lab in UK, the Chinese University of Hong Kong, the Hong Kong University of Science and Technology, University of Groningen in the Netherlands and The National Institute of Advanced Industrial Science and Technology (AIST) in Japan as a visiting researcher. Up to now, he published more than 400 peer review papers, reported more than 80 invited talks at international conferences. For his contributions, he won the National Science Fund for Outstanding Young Scholars in 2002, and elected as Optica Fellow in 2017 and Chinese Optical Society (COS) fellow in 2020 respectively.

**Anyone interested is welcome to attend!**

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