

# 北京大学量子材料科学中心

International Center for Quantum Materials, PKU

## **Weekly Seminar**

### **Extreme Sub-Cycle Waveform**

#### **Shaobo Fang**

Institute of Physics, Chinese Academy of Sciences



Time: 4:00pm, Oct. 25, 2017 (Wednesday)

时间: 2017年10月25日 (周三) 下午4:00

Venue: Room W563, Physics building, Peking University

地点:北京大学物理楼,西563会议室

#### Abstract

Extreme Sub-Cycle Waveform aims to study and control the nonlinear interactions of matter with custom-tailored sub-optical-cycle waveforms. In this regime, the time-evolution of the optical electric field deviates strongly from a sinusoidal carrier-wave oscillation with in a single cycle of light. Such custom-sculpted intense optical waveforms open up new horizons for controlling strong-field interactions in atoms, molecules, solids and nanostructures, and novel applications in life sciences.

### About the speaker

FANG received the Ph.D. degree from Hokkaido University, Sapporo Japan. From 2007 to 2011, he was an Assistant Research Scientist of the Core Research for Evolutional Science and Technology, Japan Science and Technology Agency. Since 2011, he has been a Research Scientist in the framework of the Helmholtz Association Young Scientist Program at DESY/CFEL, Hamburg Germany. He joined the Key Laboratory of Optical Physics as Associate Professor at Institute of Physics (IOP), Chinese Academy of Sciences (CAS) in 2015. His research interests include novel subcycle waveform synthesis for attosecond science and compact X-ray sources.

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