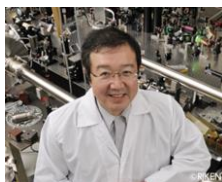


## CBC SEMINAR ANNOUNCEMENT



**Professor Katsumi Midorikawa**  
**RIKEN Center for Advanced Photonics**

**Recent Progress on Attosecond Science at RIKEN**

Since the first observation of high-order harmonic generation (HHG) around 1987, almost thirty years have passed. HHG is now established as a high-output coherent light source in the XUV region and the sole source of attosecond pulses. Here, I review our recent efforts on attosecond science by intense high harmonics including the extension of high harmonic cutoff to the sub-keV region by using new pump laser technology developed at RIKEN. Our attosecond light source, a few-pulse attosecond pulse train with a moderate spectral bandwidth, is a unique device for measuring ultrafast quantum dynamics in a molecule because it allows us to achieve sufficiently high intensity for performing attosecond-pump/ attosecond-probe measurements with moderate statistics and a sufficiently high spectral resolution for identifying the relevant states. We implemented attosecond-pump/ attosecond-probe scheme with this source to measure the electronic and vibrational response of diatomic molecules in the intrinsic timescale of the electron.

<b>Date:</b>	<b>1st August 2017 (Tuesday)</b>
<b>Time:</b>	<b>4:00pm – 5:30pm</b>
<b>Venue:</b>	<b>SPMS Research &amp; Graduate Studies Office Conference Room</b>
<b>Host:</b>	<b>Asst Professor Loh Zhi Heng</b>