

**International Center for Quantum Materials, PKU** 

## **Weekly Seminar**

## Phonon related properties studied by temperature dependent Raman spectroscopy

**Tian Yao** Nanyang Technological University



Time: 4:00pm, Oct. 12, 2016 (Wednesday) 时间: 2016年10月12日 (周三)下午4:00 Venue: w563, Physics building, Peking University 地点:北京大学物理楼,西563会议室

## Abstract

Phonon related many-body interactions such as phonon-phonon interaction and spin-phonon interaction have profound impact on the properties of materials. Temperature dependent Raman spectroscopy has been shown to be a powerful tool to study these interactions. To see the role that Raman spectra plays in these studies, recent results obtained on two types of material,  $Bi_2Te_{3-x}Se_x$  and  $Cr_2Ge_2Te_6$  will be talked.

## About the Speaker

Tian Yao, postdoc in the school of chemical and biomedical engineering at Nanyang Technological University. From 2005 to 2009, he obtained his bachelor degree in the school of physics at Peking University. From 2010 to 2015, he obtained Ph.D. in physics from University of Toronto under the supervision of Dr. Kenneth Burch. His current research interests include Raman spectroscopy of 2D materials, low dimensional magnetism and developing Raman instruments.