



## Seminar

### Ultrafast carrier, phonon and spin dynamics in topological insulators

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**Time: 4:00pm, April 22, 2015 (Wednesday)**

**时间: 2015年04月22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**

#### Abstract

Understanding carrier, phonon and spin dynamics is essential for future optoelectronic and spintronic applications of topological insulators. Here, I will present a systematic study of those dynamics in Bi<sub>2</sub>Se<sub>3</sub> and Bi<sub>2</sub>Se<sub>3.9</sub> investigated by ultrafast pump probe spectroscopy. Several detailed temperature-dependent relaxation processes are given. Some new observed phenomena may tell us more information about this type of material, i.e. electron-phonon scattering anisotropy, charge transport time, electronic structure.

#### About the Speaker

齐静波，四川大学顶峰多尺度科学研究所研究员，国家青年千人计划教授。2008年获美国Vanderbilt大学应用光学专业博士学位。毕业后，分别在美国强磁场国家实验室和Los Alamos国家实验室从事博士后研究。擅长超快激光光谱、太赫兹光谱和X射线光谱，并利用这些光谱设备研究材料中的各种超快物理现象。