



复旦大学物理系物质科学报告

Topological Electronic States and Materials Physics Department Colloquium

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The rapid development of the field of topological states is both due to conceptual theoretical advances, and to the discoveries of realistic materials where these exotic states can be hosted. First principles calculations play important roles in this field. On the theoretical front, the calculations and understanding of Berry curvature and gauge field established the connection between topology and electronic structures. On the experimental side, most of materials discovered up to now in this field are stimulated by computational predictions. In this talk, I will review recent progresses in this field, with focus on topological semimetal, a new state of quantum matters that differ from topological insulators. I will discuss some materials, including Dirac semimetals (Na_3Bi and Cd_3As_2) and Weyl semimetals (HgCr_2Se_4 and TaAs), and address some recent theoretical and experimental results.

方忠 简介



中国科学院物理研究所研究员、博士生导师、副所长，中国物理学会秘书长，美国物理学会会士 (APS Fellow)。1996 年获华中理工大学博士学位，1996-2003 年访问日本、美国，2003 年入选中科院“百人计划”回国到物理研究所工作至今。主要从事于新奇量子现象和计算凝聚态物理方面的研究工作，共发表 SCI 论文 150 余篇，他引 14000 余次。曾获 2008 年国际理论物理中心 ICTP 奖，2011 年中科院杰出科技成就奖，2011 年求是杰出科技成就集体奖，2012 年全球华人物理学会 (OCPA) “亚洲成就奖”，2013 年周培源物理奖，2013 年国家自然科学一等奖，2014 周光召基础科学奖，2016 年全国杰出科技人才奖等。

Time: 2:00pm, Tuesday, 2016.06.21

Location: Physics Building, Room 221B

(Cookies and coffee are served from 1:45 pm)