

## 课程大纲

### COURSE SYLLABUS

1.	<b>课程代码/名称</b> <b>Course Code/Title</b>	PHY5028/凝聚态物理讲坛 Condensed Matter Physics Forum
2.	<b>课程性质</b> <b>Compulsory/Elective</b>	专业选修课 Elective Course
3.	<b>课程学分/学时</b> <b>Course Credit/Hours</b>	3/48
4.	<b>授课语言</b> <b>Teaching Language</b>	中文 Chinese
5.	<b>授课教师</b> <b>Instructor(s)</b>	俞大鹏 Dapeng Yu
6.	<b>是否面向本科生开放</b> <b>Open to undergraduates or not</b>	是 YES
7.	<b>先修要求</b> <b>Pre-requisites</b>	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.) 大学物理 B(下)/ General Physics B(II) PHY105B
8.	<b>教学目标</b> <b>Course Objectives</b>	<p>(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)</p> <p>凝聚态物理学学科的研究方向较为广泛, 新材料、新理论、新技术以及新方法等成果不断涌现, 是目前物理学较为热点的研究领域。本课程计划通过邀请国内外知名大学的专家学者, 介绍当前凝聚态物理学领域中前沿的研究进展, 讲授其团队的研究成果, 课程内容基础与前沿并重, 实验与理论结合, 目标是以系统、前沿、高水平的学术讲座来拓展研究生以及高年级本科生的学术视野, 提升学生的科研素养, 激发学生的研究热情和创新性思维, 为开展研究工作奠定基础。</p> <p>Condensed matter physics has attracted a lot of attention from worldwide scientists in the last decade, due to the massive achievements in this field about novel materials, theory, technology and methods. This course will invite well-known scholars worldwide to introduce the cutting edge development in all the related research areas, and the research results in their own lab. The aim of this course is to provide systematic, cutting edge and high standard academic forum for senior undergraduate students and graduate students, which would improve the students' scientific literacy, arouse their research enthusiasm and innovative thinking, and finally lay the foundation for their future research work.</p>
9.	<b>教学方法</b> <b>Teaching Methods</b>	<p>(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)</p> <p>教学方法: 邀请国内外知名大学的专家学者 (包括诺奖、院士、杰青等), 以讲座的形式讲授凝聚态物理学领域中各学科的前沿研究进展。</p> <p>授课创新点: 课程授课人员来自国内外知名大学和研究机构, 以讲座形式安排授课内容, 每次讲座同时设置了 30 分钟的交流时间, 学生可与老师深入交流研究方法、研究经验以及一些独到的科研体会。</p> <p>This course will invite domestic and worldwide well-known scholars (Nobel laureate, Academician, Changjiang Scholar and obtainer of National Outstanding Youth Funds) to present the latest progress of</p>

cutting edge research results in condensed matter physics field.

The innovation points: The lecturers will be from well-known universities and research institutions. The form of the teaching will be lectures. Every class will have a 30-minute communication session, so that students can exchange research methods and research experiences with the teachers.

## 10. 教学内容

### Course Contents

(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)

#### Section

凝聚态物理学领域中各学科的前沿研究进展, 包含新材料、新理论、新技术以及新方法等。

学时分配: 每周 1 次讲座, 3 学时, 每学期 16 次讲座, 共计 48 学时。

This course will cover the latest cutting edge research progress in condensed matter physics field, mainly including novel theory, materials, technology, and methods.

1 lecture per week, 3 class hours, 16 lectures per semester, 48 class hours in total.

## 11. 课程考核

### Course Assessment

(① 考核形式 Form of examination; ②. 分数构成 grading policy; ③ 如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)

课程考核为通过、不通过。每学期共计 16 次讲座授课, 缺席 4 次及 4 次以上讲座的人员不予通过。

Course assessment will be set to pass or fail. 16 lectures per semester. Course absence less than four times can pass this course. Otherwise will fail.

## 12. 教材及其它参考资料

### Textbook and Supplementary Readings

无

N/A