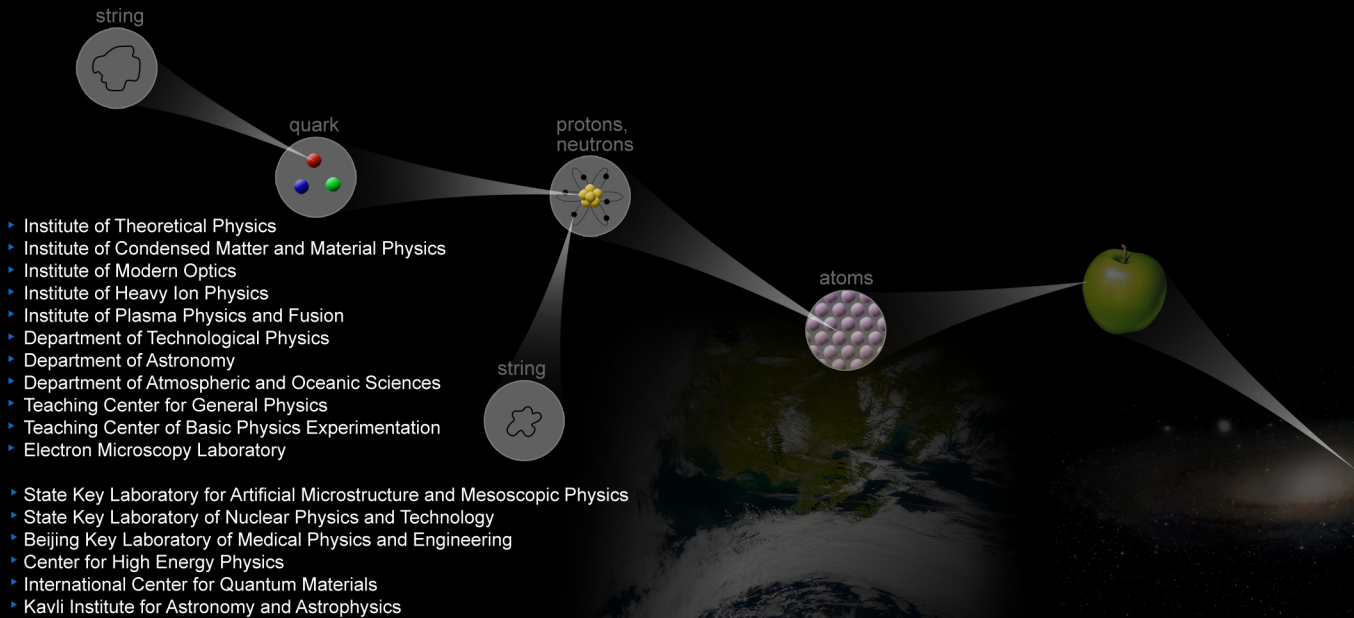


Physics Now at Peking University

北京大学物理学院

The Peking University School of Physics has its origins of the "Lixue Ke" (science) at the Imperial University of Peking. In 1913, the "WuLi Men" (physics division) was established, and this was later renamed the Department of Physics in 1919. With the reorganization of the Chinese system of higher education in 1952, the new Physics Department of Peking University, created from the merger of the physics departments of Peking University, Tsinghua University and Yenching University, became the premier center for physics in China. The School of Physics was established in 2001, and includes not only the traditional fields of study in physics, but also related physical sciences. Today, the School of Physics includes Physics, Astronomy, and Atmospheric & Oceanic Sciences and consists of eleven divisions and six research institutes, including the State Key Laboratory for Artificial Microstructure and Mesoscopic Physics and the State Key Laboratory of Nuclear Physics and Technology.

It has been nearly 100 years since Peking University established its Department of Physics. The Department's founding in 1913 was not only an announcement of the importance that Peking University placed on the physical sciences, but also a milestone in the development of modern science in China. One hundred years on, the School has made distinguished contributions to the nation and to the world in both education and academics. As it embarks on its second century, the Peking University School of Physics extends a warm welcome to distinguished scholars and outstanding young students from China and abroad who wish to join its ranks.



Faculty

Today, the School of Physics has about 200 faculty and staff, including 15 Academicians of Chinese Academy of Sciences, 4 "Qianren" Scholars, 10 "Cheung Kong" Scholars and 12 National Distinguished Young Scholars. There are 3 innovative research groups sponsored by the National Natural Science Foundation of China (NSFC): QCD & Hadron Physics, Femtosecond Optical Physics & Mesoscopic Optics, and Biological Networks.

Teaching

The School of Physics grants Bachelor of Science, Master of Science, and Doctor of Philosophy degrees. Around 200 undergraduate students and 200 graduate students are admitted each year by the School of Physics (100 for PhD degrees and 100 for Master degrees). Most undergraduate students pursue advanced studies after finishing their Bachelor degrees, and about one-third of them go to leading international universities for their advanced study.

The School of Physics has a tradition of teaching excellence in both graduate and undergraduate courses. Faculty members have received one grand, four first-class, and five second-class National Teaching Awards, and more than 30 teaching awards at provincial and ministerial levels. Scholars in the School of Physics have published more than one hundred textbooks and monographs since 1991.

Research

Research in the School of Physics is devoted not only to the frontiers of fundamental physics but also to the innovation of advanced technology. The School plays a leading role in planning and executing regional, national, and international scientific research programs. Major research fields include: high energy physics, astrophysics and cosmology, radioactive nuclear physics, high energy-density physics, key technology for advanced light sources and particle beams, interaction of particle beams with materials, mesoscopic semiconductor light emission and laser physics, ultra-fast physics, optical properties of artificial microstructures and mesoscopic devices, electro-magnetic properties of mesoscopic functional systems, mesoscopic theory and material computation, high-temperature superconductivity physics and devices, nano-material and devices, near-field optics, quantum materials and quantum manipulation, soft condensed matter physics, biophysics, medical physics and imaging, atmospheric physics and the environment, meteorology and climate change, and many others. Scholars in the School were awarded three National Prizes and two National Science & Technology Progress Awards in the past five years. During this period, the School has more than 300 on-going and completed research projects, including five national basic research programs ("973" projects), seven national high technology research and development programs ("863" projects) and more than 20 key projects of the NSFC. Research funding in the School has progressively increased in recent years.

International Cooperation

The School is involved in a wide range of international activities. A number of faculty members serve as committee members in many international scientific organizations and as editors for international leading journals. Peking University participates in many international collaborations, in particular the world's largest high-energy physics project, LHC-CMS, as well as a number of other projects, such as RIKEN and KEK in Japan, GSI and DESY in Germany, and JLab and ANL in the United States. The School of Physics organizes various international conferences and international summer schools and seminars.

Facility and Equipment

There has been rapid improvement in the facilities and equipment for scientific research in recent years, with a total expenditure of more than 200 million RMB. This has resulted in a number of flagship instruments, including a seven-femtosecond CE-phase-stabilized laser amplifier system, a molecular beam epitaxy system, a metal-organic chemical vapor deposition system, a focused ion beam workstation, and four electrostatic ion accelerators.

