



THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Innovating Today, Imagining Tomorrow

The Hong Kong University of Science and Technology (HKUST) is a dynamic, young, research university with a diverse international student body and faculty who relentlessly pursue excellence in teaching and research. Situated on a hillside overlooking scenic Clear Water Bay at the eastern edge of Hong Kong and the southeastern coast of China, HKUST has rapidly established itself as a leading institution on the academic world map. Since the university's founding in 1991, the physics department has grown from 9 to 38 faculty members and now has over 190 research graduate students. The department's research areas have also expanded to include condensed-matter physics; atomic, molecular, and optical systems and quantum optics; particle physics and cosmology; quantum information; scientific computation; soft-matter and biological physics; and metamaterials.

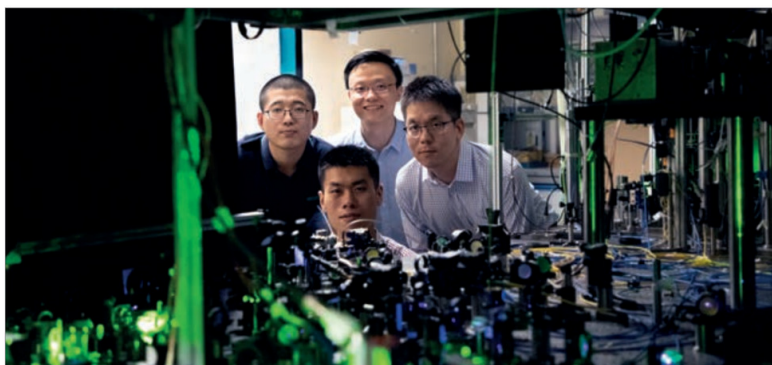
The physics department promotes the pursuit of cutting-edge research by cultivating a collaborative, supportive, and cohesive environment. For example, the Center for Fundamental Physics focuses on theoretical and experimental research about the origin, fate, and fundamental building blocks of the universe, and it has participated in several global endeavors, including the ATLAS collaboration at CERN. The emphasis of the Center for Metamaterials Research is on the design, fabrication, and characterization of different metamaterials to explore novel wave phenomena and to manipulate light and sound in ways not possible before. The newly established Center for Quantum Technologies brings together a team working across several core areas with a focus on quantum materials and devices, quantum control, and software.

The physics department's research efforts are supported by critical infrastructure, specialized equipment, high-performance computer clusters, and services provided by the university's Central Research Facilities. For example, the Materials Characterization and Preparation Facility offers advanced characterization tools, sample and materials preparation apparatus, and a helium liquefier. The Nanosystem Fabrication Facility has state-of-the-art equipment for developing innovative micro/nano devices and systems.

The department's goals for future growth are to enhance existing core strengths and build up world-class capabilities in rapidly developing areas aligned with university initiatives, such as big data and renewable energy and new energy materials. To achieve these goals, the department will strive to continuously attract outstanding new faculty members at all ranks, and it plans to fill 10 new faculty positions in the next few years.







### ABOUT US

The Hong Kong University of Science and Technology (HKUST) is a dynamic, young research university with a diverse international student body and faculty. Since the university's founding in 1991, the physics department has grown from nine to 38 faculty members and now has more than 190 research graduate students.

### WHY WORK FOR US

Situated on a hillside overlooking scenic Clear Water Bay at the eastern edge of Hong Kong and the southeastern coast of China, HKUST has rapidly established itself as a leading institution on the academic world map. The HKUST physics faculty members are currently working on a broad range of research areas, from the smallest to the largest scale. Their cutting-edge research is supported by critical infrastructure, specialized equipment, high-performance computer clusters, and services provided by the university's Central Research Facilities.

### TRAINING AND DEVELOPMENT

The physics department promotes the pursuit of cutting-edge research by cultivating a collaborative, supportive and cohesive research-intensive environment, and the development of talent. The department has an inclusive academic/administrative committee structure that focuses on research strategy and planning, faculty recruitment and mentoring, professional review and advancement,

and postgraduate studies and affairs. In addition, the department has implemented a number of mechanisms to promote faculty diversity and to enhance the integration and professional development of junior faculty members.

### GRADUATE SCHEMES

The physics department manages and offers research postgraduate degrees (M.Phil. and Ph.D.) in physics and in nanoscience and technology with an annual enrolment of 40–50 students. The department also manages a one-year taught Master of Science program on data-driven modeling with an enrolment of approximately 60 students. Our postgraduate programs are built upon our long-standing practices for educational enrichment, quality assurance, and career development. They prepare students to attain a broad horizon of careers from academic institutions to hi-tech industries.

### WHAT WE ARE LOOKING FOR

The department's goals for future growth are to enhance existing core strengths and build up world-class capabilities in rapidly developing areas aligned with university initiatives, such as data science, new energy materials, and quantum technologies. To achieve these goals, the department will strive to continuously attract outstanding new faculty members at all ranks, and it plans to fill 10 new faculty positions in the next few years.

### LOCATION

Hong Kong

### NUMBER OF EMPLOYEES

135

### MAIN AREAS OF RESEARCH

Cold atoms, optics and quantum information; condensed-matter experiments and advanced materials; condensed-matter theory, statistical and computational physics; particle physics and cosmology; soft matter and biological physics; metamaterials, photonic and phononic crystals

### POSITIONS AVAILABLE

We seek (i) experimental candidates in quantum matter and quantum information, including quantum and low-dimensional materials, materials with strong electronic correlations, cold atoms, quantum optics, and quantum-enabled technologies; (ii) theoretical candidates in condensed-matter theory, statistical physics, neural networks or data analytics; and (iii) experimental and theoretical candidates in high-energy theory and cosmology, particle-physics experiment, and observational cosmology

### DESIRED DEGREE & DISCIPLINES

Must possess a Ph.D. in physics or related field and provide evidence of strong research productivity

### HOW TO APPLY

Apply online: [physics.ust.hk/eng/detail.php?otherid=3](https://physics.ust.hk/eng/detail.php?otherid=3)

### CLOSING DATE

All year round

### CONTACT

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