

2025-26  
Admission

The Chinese University of  
Hong Kong

## Postgraduate Studies (MPhil-PhD) in “Physics” and “Materials Science and Engineering”

### Features and Strengths

State-of-the-art research and participation in international collaborations (*CERN, LIGO, Daya Bay Neutrino project*)

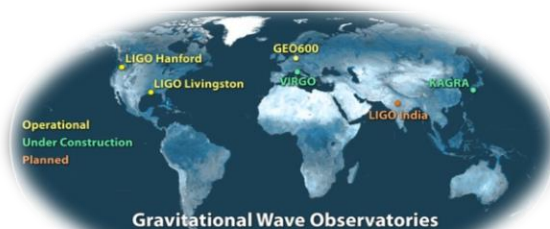
Close supervisor-student relationship in collaborative mode

Many of the students' works publishable in high impact journals (e.g. *Nature, Nature Physics, Nature Nano Technology, PRL, Advanced Materials*, etc.)

Financial support for conference presentations

Excellent facilities (experimental and computational)

Employment opportunities ranging from academic, governmental, and private sector positions



LIGO Scientific Collaboration



Frequent discussions and interactions between students and supervisors



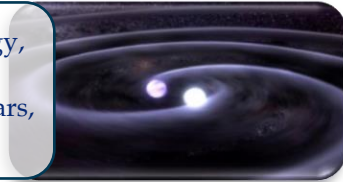
Our students have won a number of awards and scholarships in various academic activities



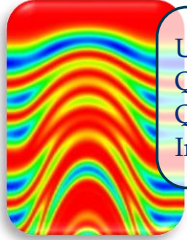
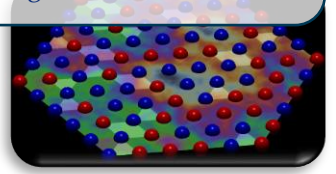
High-performance powerful clusters for parallel calculations

# Research Areas

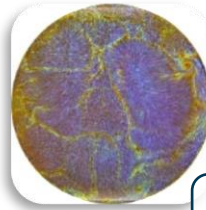
Particle Physics, Cosmology,  
High Energy Physics,  
Gravitational Waves, Pulsars,  
Star Formation



Condensed Matter Physics, Electronic and Optical  
Properties of Semiconductor Nanostructures,  
Interacting Electron-Phonon Systems, Strongly  
Correlated Systems, Topological Matters



Ultracold Atoms and Molecules,  
Quantum Matters, Quantum Optics,  
Quantum Sensing, Quantum  
Information and Quantum Physics



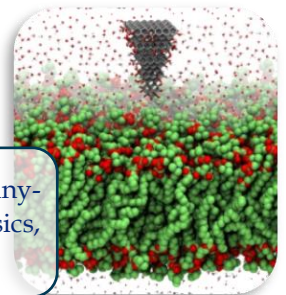
Complex Systems, Turbulence

Surface Science and Nanostructures on  
Surfaces, Synthesis and Property of  
Metal and Semiconductor Nano-  
structures, Plasmonics Properties of  
Metal Nanostructures, Optical  
Properties of Semiconductors, Non-  
linear Optical Properties of Organic  
Materials

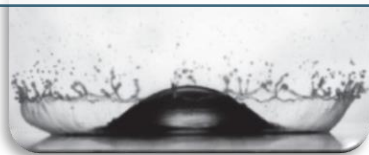


**Flexible scheme to  
best match students  
and supervisors'  
research interests**

Computational Physics, Many-  
body Computational Physics,  
Computational Biophysics



Bacterial Motion, Colloids, Glass  
Formation, Liquid-Solid Impact



Fabrication and Characterization of Biomorphic  
Materials, Ceramic-Metal Matrix Compounds,  
Thin Film Growth and Magnetic Oxides,  
Nanostructured Metal Composites, Nano-Bio  
Interface and Nanopatform for Theranostic  
Applications, Energy Storage Materials

## Destinations After Graduation

### Higher Institution

Tenure track faculty and postdoc positions, research fellows, etc.

- US: Massachusetts Institute of Technology, Johns Hopkins University, University of Illinois at Urbana-Champaign, UC Santa Barbara, Boston College, Washington University, ...
- Europe: University of Ulm (Germany), University of Twente (Netherlands), University College London (UK), ...
- Asia: The Chinese University of Hong Kong, HKUST, Peking University, Tsinghua University, Fudan University, National University of Singapore, The University of Tokyo, National Taiwan University, ...

### Commerce & Industry

Research scientists, engineers, consultants, analysts, etc.

- China: ASTRI, ClusterTech Limited, SAE Magnetics, Science Park (HK), Jinrui Futures, Bank of China, ...
- Asia: APEC Climate Center (Korea), ASM Pacific Technology Ltd. (Singapore), Sony Corporation (Japan), ...
- International: Bloomberg, Environmental Resources Management, Intel, KPMG Netherlands, EDG Inc. (US), iFire Co (Canada), ...

### Government

Postdoctorals, Scientific officers, etc.

- Education Bureau (HK), Hong Kong Observatory, Department of Health (HK), Bureau of Meteorology (Australia), National Astronomical Observatory of China, National Institutes of Health (US), ...

## Facts and Figures

|           |   |                   |  |
|-----------|---|-------------------|--|
| 29        | Faculty staff                               | 232               | Students currently enrolled in M.Phil. and Ph.D. degrees                   |
| ~80       | Courses (PG & UG) offered by the department | HK\$18,725-19,275 | Monthly studentship for regular full-time RPg students (2024-25)           |
| 2 years   | Normative study period of an M.Phil. degree | HK\$28,100        | Monthly stipend for Hong Kong PhD Fellowships* (2024-25)                   |
| 3-4 years | Normative study period of a Ph.D. degree    | HK\$42,100        | Annual tuition fee (2024-25)<br><b>(Tuition waiver for local students)</b> |

\* Hong Kong PhD Fellowship Scheme (HKPFS) (<http://www.rgc.edu.hk/hkphd>), established by the Hong Kong Research Grants Council (RGC), provides an annual stipend of HK\$337,200 and a conference travel allowance of HK\$14,000 per year for each awardee.

## How to Apply

### Project lists and detailed information

Physics (PHYS)



Materials Science and Engineering (MSEG)



- Online application system (open in September):
  - ❖ CUHK: <https://www.gs.cuhk.edu.hk/admissions/admissions/how-to-apply>
  - ❖ HKPFS: <http://cerg1.ugc.edu.hk/hkpfs/apply.html>
  - ❖ Applicants applying to HKPFS should first submit initial application through the HKPFS online application system and obtain a "Reference Number". Applicants should then submit the full application through CUHK's online application system and quote the "Reference Number".
- E-mail will be sent to applicants within 1 week after submission of application. Follow the instructions in the e-mail and submit required documents (e.g. official transcript, CV, Research statement, recommendation forms, etc.) to our Division by the deadline.
- Enquiries:
  - [pgadm@phy.cuhk.edu.hk](mailto:pgadm@phy.cuhk.edu.hk) (PHY)
  - [pgadm-mse@phy.cuhk.edu.hk](mailto:pgadm-mse@phy.cuhk.edu.hk) (MSE)

### Application Deadlines

- **HKPFS Application:**
  - 1 December 2024, 12:00 noon HKT (To submit an initial application to RGC)
  - 1 December 2024, 11:59 p.m. HKT (To submit full application to CUHK)
- **CUHK Application:**
  - Regular round: 1 December 2024
  - Clearing round: 31 March 2025
- *Early applications are desirable!*

# Living on Campus / in Hong Kong

## Services and Facilities at CUHK

- ★ **University Library** ★ has one of Hong Kong's most comprehensive collections
- ★ **University Health Service** ★ provides primary medical care
- ★ **Sports Facilities** ★ include a sports field for track and field, gymnasiums, an Olympic-sized swimming pool, tennis and squash courts, weight-training rooms and a water-sports centre
- ★ **Independent Learning Centre** ★ provides students with an immersive language-learning environment to improve their Chinese and English proficiency
- ★ **Office of Student Affairs** ★ offers professional advice on personal growth and development
- ★ **Postgraduate Student Society** ★ organizes and promotes academic and recreational activities (such as student conference, movie nights, hiking trips, etc.)



We enjoy the presence of Prof. Chen Ning Yang in his role of Professor-at-Large at CUHK



## Hong Kong • Our Home

The universities adopt international standards in curriculum design and quality assurance – **qualifications awarded are internationally recognised**

A high efficiency, modern and vibrant metropolis – **offering super global, regional and local connectivity**

**Studying in Hong Kong is full of opportunities to enrich your study life, it will be an amazing experience!**

A melting pot of Eastern and Western cultures – **Chinese and international cuisine, brands and integrated entertainment**

World-class conditions in finance, trade, innovation and transportation – **serving as a pilot city in the Guangdong - Hong Kong - Macao Greater Bay Area**

