

# Admission talk for 2026 Physics @ CUHK

(JUPAS 4601 CUHK Broad-based Science 大類收生)

(JUPAS 4690 Enrichment Stream in Theoretical Physics 理論物理精研)

Department of Physics

JUPAS hotline

Email: [ugadm@phy.cuhk.edu.hk](mailto:ugadm@phy.cuhk.edu.hk)

Tel: (852) 3943-6154



# The Chinese University of Hong Kong 香港中文大學



百萬大道

- A comprehensive university founded 1963 as a federation of Chung Chi (崇基), New Asia (新亞) and United (聯合) Colleges 書院.
- Currently, 9 colleges 書院 (崇基、新亞、聯合、逸夫、晨興、善衡、敬文、伍宜及和聲) and 9 faculties/schools 學院 (Arts 文學, Business 工商管理, Education 教育, Engineering 工程, Law 法律, Medicine 醫, Science 理, Social Science 社會科學 and Graduate School 研究院).



# Department of Physics 物理系

- Founded more than 60 years. One of the oldest in CUHK.
- 16 Professors 教授, 2 Associate Professors 副教授, 9 Assistant Professors 助理教授, 4 Research Assistant Professor 研究助理教授, and 7 Senior Lecturers/ Lecturers 講師 → 38 faculty members



You may want to study physics if you want to:

- know how Nature works: **From the atom to the universe**
- become a **scientist** 科學家, a **physics professor** 物理教授, a **science teacher** 理科老師, an **engineer** 工程師, a **financial analyst** 金融分析師, .....
- or even start your own innovative technology company 科技初創公司

CUHK Physics is the place for you because **we care very much** about **teaching** 非常關心教學

CUHK Physics has a **very good reputation** 優良聲譽 that **we are very serious in education**

Therefore, we provide a **rigorous curriculum** 嚴謹課程 that helps you to build a solid foundation 堅實的基礎

The curriculum may **not be as easy as you think** but we try our best to ensure “**位位皆尖兵**”

- We have been nurturing over 3000 physics students over 60 years
- In recent years, over 50% of graduates move on to graduate school in top schools around the world

| 2025                 | 2024             | 2023            | 2021            |
|----------------------|------------------|-----------------|-----------------|
| University of Oxford | Imperial College | UC Berkeley     | U. of Cambridge |
| Imperial College     | Ohio State U.    | Stonybrook      | Duke U.         |
| U. of Wisconsin      | Stonybrook       | Syracuse        | U. of Toronto   |
| U. of New Hampshire  | Rice University  | U. of Wisconsin | ETH Zurich      |
| U. of Utrecht        | U. of Wisconsin  | Purdue          | Johns Hopkins   |
| U. Of Tübingen       | UIUC             | T. U. Munich    | Ohio State U.   |
| HITS                 | Penn State       | U. of Colorado  | UIUC            |

- More than 50 are professors at local and overseas universities
- More than 400 graduates have become physics teachers

# Student achievements 學生成就

- Every year, we have students awarded the **Innovative and Technology Scholarship 創新科技獎學金** (\$150,000). Placed at the best of the best students in HK.
- **More than 35%** students have been awarded CN Yang scholarships, Undergraduate Research Experience Grant, Chung Chi Scholarship for Excellence, Physics Prize, Admission Scholarship, 1967 Alumni Scholarship, .....
- They have been awarded from more than **2000 scholarships and prizes from CUHK** covering **tuition fee 學費** and **living expense 生活費**.
- Students won the international robotics contests **機械人大賽**, data and computational competitions **編程大賽** .....

- Participated in large-scale international research projects 大型國際研究項目

High energy physics at CERN 歐洲核子研究中心

LIGO for measuring gravitational waves 重力波



Astrophysics 天體物理



Daya Bay for studying neutrinos 中微子

- Published research papers in high-impact journals.

# Physics at CUHK: Curriculum 課程 Overview

- University Physics (1<sup>st</sup> and 2<sup>nd</sup> years)
- Classical Mechanics 經典力學 (2<sup>nd</sup> and 3<sup>rd</sup> years)
- Quantum Mechanics 量子力學 (3<sup>rd</sup> and 4<sup>th</sup> years)
- Electromagnetic theory 電磁理論 (3<sup>rd</sup> and 4<sup>th</sup> years)
- Thermal and Statistical Physics 熱物理和統計物理 (3<sup>rd</sup> and 4<sup>th</sup> years)
- Mathematical Skills 數學技能 (1<sup>st</sup> – 3<sup>rd</sup> years)
- Experimental Skills 實驗技能 (1<sup>st</sup> – 3<sup>rd</sup> years)
- Computational Skills 計算/編程技能 (2<sup>nd</sup> and 3<sup>rd</sup> years)
- Other electives (3<sup>rd</sup> and 4<sup>th</sup> years)

47 (Science)/57 (ESTP) compulsory units and 24/15 elective units out of 123 total units

## Enrichment Stream in Theoretical Physics 理論物理精研

- For **elite 精英** students who are talented in physics and mathematics (**top 10 program in CUHK based on admission score 收生成績**)
- **Critical mass 凝聚** of very good students love physics
- Provide a solid foundation on theoretical physics and mathematics
- Provide more **project learning** and **research opportunities**
- More **small-group discussion** classes
- **Guaranteed 保證 research opportunities** at an earlier stage

# Learning opportunities beyond classroom

**SURE – Summer Undergraduate Research Exchange 暑期研究交流**

Cambridge, Oxford, Caltech, CERN, LIGO, Chicago, Toronto, ....

**OPUS – Overseas Program for Undergraduate Students 海外學生交流**

Berkeley, Fudan

**STAR – Summer Teacher Apprenticeship 暑期教師實習**

Local secondary schools

**Internships 實習計劃**

Summer Research Internship, HK observatory, Space Museum, Science Museum

**Exchange programs 大學和書院交流生計劃**

University and colleges

**Co-op programs 在學工作計劃**

More than 75 companies participate

- **More than 35%** of students participate the Summer Research Internship 暑期研究實習 in their **1<sup>st</sup> and 2<sup>nd</sup> years** with financial support
- **More than 30-40%** of students join oversea exchange program, local teaching assistant, and other internships such as HK observatory, Science Museum in **2<sup>nd</sup> and 3<sup>rd</sup> years**
- **More than 40%** of students join university/college exchange program and co-op program
- **All students** spend **at least one semester 一學期** in conducting research

# Science 大類收生 (JS 4601)

## 4 Core Subjects 核心科目

Level 3 in Chinese and English

Level 2 in Mathematics

Attained in Citizenship and Social Development

- Best 5
- Declare Physics as major programme after admission into CUHK Science

## 2 Elective Subjects 選修科目

1st - Level 3 in any ONE subject from Biology / Chemistry / Physics / M1 or M2

2nd - Level 3 in any ONE subject in Category A 甲類科目

## Some subjects with Heavier Weighting 比重

2.0X Biology, Chemistry, Physics, Mathematics, M1 or M2

1.5X English OR Mathematics, Economics, Geography, Information and Communication Technology, Technology and Living (Food Science & Technology)

(A maximum of 3 subjects will be weighed heavier)

## Bonus Point Arrangement

6th and 7th subjects in Category A or Category C or ApL

Outstanding performance in interview 面試

School Principal's Nominations (SPN) 校長推薦計劃

# 理論物理精研 (JS 4690)

## 4 Core Subjects

Level 3 in Chinese and English

Level 4 in Mathematics

Attained in Citizenship and Social Development

- Best 5
- Direct admission to CUHK Physics via JUPAS

## 2 Elective Subjects

1st - Level 4 in Physics

2nd - Level 3 in any ONE subject from M1 or M2 (preferred) / Biology / Chemistry / Economics / Geography / Information and Communication Technology / Technology and Living (Food Science & Technology)

## Some subjects with Heavier Weighting

| HKDSE Subject    | Physics | Mathematics and M1/M2 | English/Chinese Language | Other Subjects in Category A |
|------------------|---------|-----------------------|--------------------------|------------------------------|
| Weighting factor | × 2     | × 1.5                 | × 1                      | × 1                          |

- A higher weighting will be assigned to
  - ✓ HKDSE Physics, Mathematics & M1/M2
- Extra Bonus Points will be given to
  - ✓ If obtain 5\*\* in HKDSE Physics, Mathematics & M1/M2
  - ✓ Outstanding performance in interviews 面試 (Tentatively scheduled for May/June 2026)
  - ✓ 6th and 7th subjects in Category A
- JUPAS Quota: ~19
- **Science 大類收生 students** with outstanding academic performance can **apply to transfer to Enrichment Stream in Theoretical Physics 理論物理精研** after their first year

# JUPAS Admission Score 2025

## (理論物理精研)

| Admission Figures | CHI | ENG            | MATH            | CSD | M1/M2          | PHY<br>(1 <sup>st</sup> Elective) | 2 <sup>nd</sup><br>Elective | 3 <sup>rd</sup><br>Elective | Program<br>Weighted<br>Total |
|-------------------|-----|----------------|-----------------|-----|----------------|-----------------------------------|-----------------------------|-----------------------------|------------------------------|
| Upper<br>Quartile | 5   | 5              | 5 <sup>**</sup> | A   | 5 <sup>*</sup> | 5 <sup>**</sup>                   | 5 <sup>*</sup>              | 5                           | 52.75                        |
| Median            | 4   | 5 <sup>*</sup> | 5               | A   | 5 <sup>*</sup> | 5 <sup>*</sup>                    | 5 <sup>*</sup>              | N <sub>3</sub>              | 46.75                        |
| Lower<br>Quartile | 4   | 4              | 5 <sup>*</sup>  | A   | 5 <sup>*</sup> | 5                                 | 5                           | 5                           | 43                           |

## 5<sup>\*\*</sup> = 8.5, 5<sup>\*</sup> = 7, 5 = 5.5, 4 = 4, 3 = 3, 2 = 2, 1 = 1

Phys × 2, Math \* M1/M2 × 1.5

Based on admission score, we are one of the CUHK's **top 10** programs!

# The STEM Talent Scheme

- “3 or more stars with lowest level 3 or above” (e.g. 5\*5\*5\*, 5\*\*5\*3, 5\*\*5\*\*5\*\*, ...) in 3 STEM-related elective subjects#三科 STEM 選修科目#中考獲最少三粒星
- For 理論物理精研 (JS4690), **Physics** must be one of the 3 STEM-related elective subjects
- Put the science program in **higher priority** 高優先
- Good for those who satisfy the above criteria but fail to fulfill the minimum requirement in the 4 core subjects (3322A) by one level in any one subject
  - ◆ Programs will consider their applications and offer interviews to the potential applicants
  - ◆ The application results will be announced as Main Round offer results 正式遴選結果 by JUPAS

# More Information

Undergraduate Admission Inquiry: [physics@phy.cuhk.edu.hk](mailto:physics@phy.cuhk.edu.hk)

Physics Curriculum Inquiry: [physics@phy.cuhk.edu.hk](mailto:physics@phy.cuhk.edu.hk)

Physics Department Webpage: <http://www.phy.cuhk.edu.hk>

Science Faculty Webpage: <http://www.sci.cuhk.edu.hk/>

