

SPECIAL

Thanks to

HKIAA Local Organising Committee:

*Kunyuan Hong, Yicong Li, Arena Liang (LOC Chair & Moderator),*

*Ziyi Lyu, Zhibong Shi, Mingyu Tian, Shengzhu Wang, Nan Xu,*

*Yiban Yin, Xiangyu You, Yuxuan Zeng, Zijian Zhang,*

*Ziliang Zhang, Qingchuan Zhao*

Department of Physics

Department of Earth & Planetary Sciences

Faculty of Science

The University of Hong Kong

THE HONG KONG INSTITUTE FOR  
**ASTRONOMY** *And*  
**ASTROPHYSICS**  
INAUGURATION CEREMONY &  
THE FIRST HKIAA SYMPOSIUM

TIME & LOCATION

03 November  
2025

The University of Hong Kong

09:00 - 12:00 Inauguration & Morning Session

Lecture Hall CBA, G/F, Chow Yei Ching Building  
香港大學周亦卿樓G層CBA講堂

14:00 - 17:30 Afternoon Sessions

Digital Interactive Lab, 2/E, Main Library  
香港大學圖書館2樓DIL會議室

香港天文與天體物理研究所  
成立儀式暨第一屆HKIAA研討會

## Inauguration Ceremony Programme 成立典禮議程

09:00 – 10:00, November 3, 2025

**Venue** / 典禮地點: Lecture Hall CBA, Chow Yei Ching Building / 香港大學周亦卿樓CBA講堂

**Dress Code** / 著裝要求: Business Formal (speakers); Business Professional (attendees)

**Registration** / 報道登記: 08:30 – 09:00 Ground Floor, Chow Yei Ching Building,  
The University of Hong Kong / 香港大學周亦卿樓地面

- 09:00 – 09:05 ○ Opening and Guest Introduction / 主持人開場及介紹來賓
- 09:05 – 09:10 ○ Inauguration Address by Professor Xiang Zhang, President and Vice-Chancellor  
/ 香港大學校長張翔教授致成立典禮辭
- 09:10 – 09:20 ○ HKIAA Introductory Address by Professor Bing Zhang, Chair Professor of Astrophysics and  
Founding Director of HKIAA / 香港天文與天體物理研究所始創所長張冰教授致介紹辭
- 09:20 – 09:25 ○ Congratulatory Address by Professor Dong Sun, Secretary for Innovation, Technology and  
Industry of Hong Kong / 香港創新科技及工業局局長孫東教授致賀辭
- 09:25 – 09:30 ○ Congratulatory Address by Professor Yipeng Jing, Academician of the Chinese Academy  
of Sciences, Shanghai Jiao Tong University / 中國科學院院士、上海交通大學景益鵬教授致賀辭
- 09:30 – 09:35 ○ Congratulatory Address by Professor Shengcai Shi, Academician of the Chinese Academy  
of Sciences, Purple Mountain Observatory / 中國科學院院士、紫金山天文台史生才教授致賀辭
- 09:35 – 09:40 ○ Congratulatory Address by Professor Matthew Bailes, 2023 Shaw Laureate in Astronomy /  
2023年邵逸夫天文學獎得主Matthew Bailes教授致賀辭
- 09:40 – 09:45 ○ Plaque-Unveiling Ceremony / 揭牌儀式 Officiated by President and Vice-Chancellor  
Xiang Zhang, joined by Professor Dong Sun, Professor Yipeng Jing,  
Professor Shengcai Shi, Professor Matthew Bailes, Professor Bing Zhang
- 09:45 – 09:50 ○ Photo-Taking Session / 來賓合影
- 09:50 – 10:00 ○ Video Messages by Distinguished Guests / 傑出嘉賓視頻致辭

**Morning Coffee Break** / 上午茶歇: 10:00 – 10:30

## Morning Symposium Programme 上午研討會議程

10:30 – 12:00, Lecture Hall CBA, Ground Floor, Chow Yei Ching Building / 周亦卿樓G層CBA講堂

**Session Chair:** Bing Zhang, The University of Hong Kong

### Featuring Presentations by HKIAA Members

- 10:30 – 10:45 ○ Transient and Extreme Accretion around Black Holes  
Lixin Dai, The University of Hong Kong
- 10:45 – 11:00 ○ Dark Matter under the Gravitational Lens  
Jeremy Jin Leong Lim, The University of Hong Kong
- 11:00 – 11:15 ○ Resonances in Extrasolar Planetary System  
Man Hoi Lee, The University of Hong Kong
- 11:15 – 11:30 ○ Pulsars: Laboratories for Understanding Extreme Physics  
Stephen Chi Yung Ng, The University of Hong Kong
- 11:30 – 11:45 ○ The Stellar Populations and Initial Mass Function in Massive Galaxies  
Meng Gu, The University of Hong Kong
- 11:45 – 12:00 ○ In Search of Cosmological Background Neutrinos  
Ming Chung Chu, The Chinese University of Hong Kong

**Luncheon** / 午餐 12:00 – 14:00 (for all Invited Attendees)  
Senior Common Room, 14 & 15/F, K. K. Leung Building

## Afternoon Symposium Programme (Session I) 下午研討會議程 - 第一節

14:00 – 15:30, Digital Interactive Lab, 2/F, Main Library / 香港大學圖書館2樓 DIL會議室

**Session Chair:** Tao Liu, The Hong Kong University of Science and Technology

### Featuring Presentations by Affiliated HKIAA Members

- 14:00 – 14:15 ○ Interstellar Medium and Astronomical Instrumentation  
Renbin Yan, The Chinese University of Hong Kong
- 14:15 – 14:30 ○ Precision Nebular Astrophysics with CIRAAS  
Yuguang Chen, The Chinese University of Hong Kong
- 14:30 – 14:45 ○ Non-Linearities in Black Hole Perturbation Theory  
Sung Ching Sam Wong, City University of Hong Kong
- 14:45 – 15:00 ○ Simulating Gas and Dark Matter during the Epoch of Reionization  
Tsang Keung Chan, The Chinese University of Hong Kong
- 15:00 – 15:15 ○ Cosmic Ray Interactions in the Sun and Its Implications for Dark Matter  
Kenny Chun Yu Ng, The Chinese University of Hong Kong
- 15:15 – 15:30 ○ Q&A and Discussion

**Afternoon Tea Break / 下午茶歇** 15:30 – 16:00

## Afternoon Symposium Programme (Session II) 下午研討會議程 - 第二節

16:00 – 17:30, Digital Interactive Lab, 2/F, Main Library / 香港大學圖書館2樓 DIL會議室

**Session Chair:** Renbin Yan, The Chinese University of Hong Kong

### Featuring Presentations by Affiliated HKIAA Members

- 16:00 – 16:15 ○ Unveiling Ultralight Axion-like Dark Matter — A PTA-PPA Method  
Tao Liu, The Hong Kong University of Science and Technology
- 16:15 – 16:30 ○ Probing Dark Matter Self-Interactions in the Sky  
Yiming Zhong, City University of Hong Kong
- 16:30 – 16:45 ○ Probing New Physics Beyond the Standard Model using Astrophysics  
Yue Zhao, The Hong Kong University of Science and Technology
- 16:45 – 17:00 ○ Gravitational-Wave Transient Detection  
Otto A. Hannuksela, The Chinese University of Hong Kong
- 17:00 – 17:15 ○ Multi-Messenger, Multi-Wavelength, Transient Astrophysics  
Bing Zhang, The University of Hong Kong
- 17:15 – 17:20 ○ Closing Remarks and Future Outlook  
Bing Zhang, The University of Hong Kong
- 17:20 – 17:30 ○ Discussion

### Banquets for all Invited Attendees:

**November 2, 19:00 – 21:00** HKIAA Development Advisory Group Dinner / HKIAA發展建議會晚宴  
Aurum Dining, 3/F Oasis Aurum 181 Hotel, 181 Connaught Rd W, Sai Wan

**November 3, 18:30 – 21:00** HKIAA Symposium Dinner/ HKIAA研討會晚宴  
MoMo Café, Courtyard by Marriott Hong Kong, 167 Connaught Rd W, Sai Ying Pun

## Invited Attendees

### 嘉賓名單

#### HKU Distinguished Representatives

Prof. Xiang Zhang	President and Vice-Chancellor
Prof. Benjamin Kane	Associate Dean (Teaching and Learning), Faculty of Science
Prof. Shuang Zhang	Interim Head and Chair of Physics, Department of Physics
Prof. Xiaodong Cui	Associate Head and Chair Professor, Department of Physics
Prof. Shizhong Zhang	Associate Head, Department of Physics
Prof. Quentin A. Parker	Director of Lab for Space Research

#### Honored Guests

Prof. Dong Sun, JP	Secretary for Innovation, Technology and Industry, The Government of the Hong Kong SAR
Mr. Henry K. W. Yip	Founder, Chairman of the Executive Board, HK (International) Aerospace Charitable Foundation Ltd.
Ms. Susanna Ng	Vice-Chair of the Executive Board, HK (International) Aerospace Charitable Foundation Ltd.

#### Distinguished Guests

Prof. Reinhard Genzel	2020 Nobel Prize Laureate in Physics, Director of the Max Planck Institute for Extraterrestrial Physics
Prof. Matthew Bailes	2023 Shaw Laureate in Astronomy, Director of the Australian Research Council's Centre of Excellence for Gravitational Wave Discovery
Prof. Michael Perryman	2022 Shaw Laureate in Astronomy, University of Heidelberg & Max Planck Institute for Astronomy
Prof. Yipeng Jing	Academician of the Chinese Academy of Sciences, Shanghai Jiao Tong University
Prof. Shengcai Shi	Academician of the Chinese Academy of Sciences, Purple Mountain Observatory
Prof. Zhen Cao	Academician of the Chinese Academy of Sciences, Institute of High Energy Physics
Prof. Gang Zhao	Academician of the Chinese Academy of Sciences, National Astronomical Observatories
Prof. Xuefei Chen	Yunnan Observatories, Chinese Academy of Sciences
Prof. Xuefei Gong	Nanjing Institute of Astronomical Optics & Technology, Chinese Academy of Sciences
Prof. Xi Kang	Zhejiang University
Prof. Dali Kong	Shanghai Astronomical Observatory, Chinese Academy of Sciences
Prof. Di Li	Tsinghua University
Prof. Xiangdong Li	Nanjing University
Prof. Enwei Liang	Guangxi University
Prof. Weipeng Lin	Sun Yat-sen University
Prof. Hongbang Liu	Guangxi University

Prof. Jifeng Liu	National Astronomical Observatories, Chinese Academy of Sciences
Prof. Shude Mao	Westlake University
Prof. Hongguang Wang	Guangzhou University
Prof. Qingwen Wu	Huazhong University of Science and Technology
Prof. Xuefeng Wu	Purple Mountain Observatory, Chinese Academy of Sciences
Prof. Yunwei Yu	Central China Normal University
Prof. Huawei Zhang	Peking University
Prof. Pengjie Zhang	Shanghai Jiao Tong University
Prof. Xia Zhou	Xinjiang Astronomical Observatory, Chinese Academy of Sciences
Prof. Jin Chang	University of Science and Technology of China (video message)
Prof. Luis Ho	The Kavli Institute for Astronomy and Astrophysics, Peking University (video message)
Prof. Shrinivas Kulkarni	California Institute of Technology (video message)

#### Full HKIAA Members

Prof. Lixin Dai	The University of Hong Kong
Prof. Meng Gu	The University of Hong Kong
Prof. Man Hoi Lee	The University of Hong Kong
Prof. Jeremy Jin Leong Lim	The University of Hong Kong
Prof. Stephen Chi Yung Ng	The University of Hong Kong
Dr. Jason Chun Shing Pun	The University of Hong Kong
Prof. Zhonghua Yao	The University of Hong Kong
Prof. Bing Zhang	The University of Hong Kong
Prof. Binzheng Zhang	The University of Hong Kong

#### Affiliated HKIAA Members

Prof. Tsang Keung Chan	The Chinese University of Hong Kong
Prof. Yuguang Chen	The Chinese University of Hong Kong
Prof. Ming Chung Chu	The Chinese University of Hong Kong
Prof. Otto A. Hannuksela	The Chinese University of Hong Kong
Dr. Po Kin Leung	The Chinese University of Hong Kong
Prof. Hua-bai Li	The Chinese University of Hong Kong
Dr. Lap Ming Lin	The Chinese University of Hong Kong
Prof. Tao Liu	The Hong Kong University of Science and Technology
Prof. Kenny C. Y. Ng	The Chinese University of Hong Kong
Prof. Yi Wang	The Hong Kong University of Science and Technology
Prof. Sung Ching Sam Wong	City University of Hong Kong
Prof. Renbin Yan	The Chinese University of Hong Kong
Prof. Yue Zhao	The Hong Kong University of Science and Technology
Prof. Yiming Zhong	City University of Hong Kong