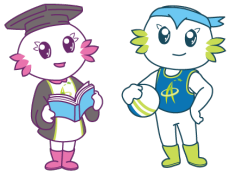
香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education
香港特別行政區政府教育局資助
Subvented by the Education Bureau, the Government of the HKSAR



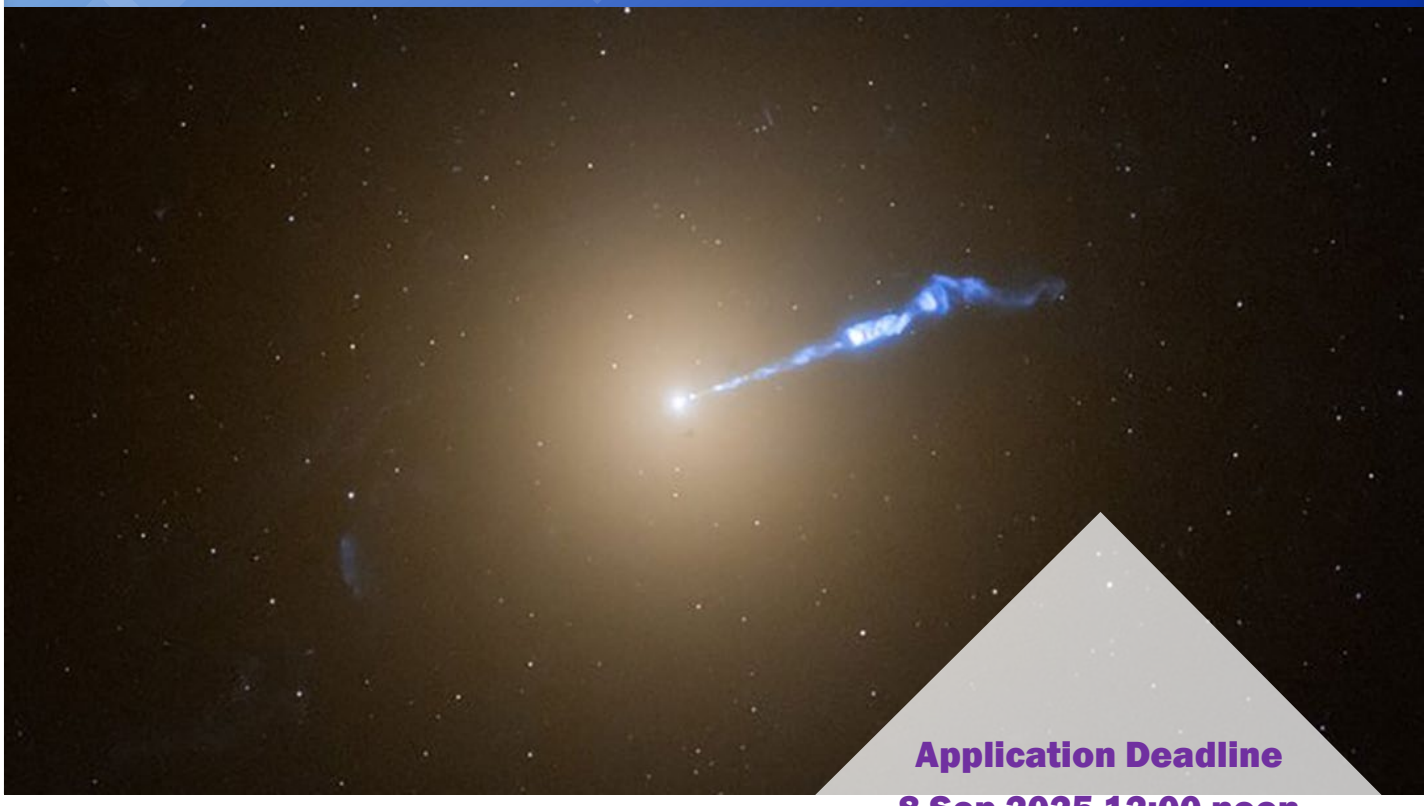
Learn about Gigi & Yoyo

[Gifted Programme]

E3AST004C
(Token-required)

Astronomy Course (Level III): The Search for the First Stars of Our Universe

Teachers of Galaxy Scientific Group



Application Deadline
8 Sep 2025 12:00 noon

Result Release
19 Sep 2025

Intended Learning Outcomes

Upon completion of the gifted programme, gifted students should be able to:

1. explain different stages in the life of stars, and describe evidence suggesting the big bang origin of the universe;
2. use Doppler effect and Newton's laws to analyse starlight and orbital motion;
3. set up and use telescopes to make observations;
4. discuss ethical issues in space research.

If student members withdraw from the programme after the Application Deadline, the token will be deducted.

Gifted Programme Introduction

One of the most surprising recent discoveries made by the James Webb Space Telescope is the existence of supermassive black holes in the very early universe. How could such massive objects form so soon after the Big Bang? Might the first stars of the universe provide the key to our understanding of this phenomenon? Join us to uncover the mysteries surrounding the origin of supermassive black holes and the first stars that shaped our cosmos today.

Schedule

Session	Date	Time	Venue
1	1 Nov	2:00 p.m. – 5:00 p.m.	Room 105, HKAGE
2		6:00 p.m. – 9:00 p.m.	Ma Wan / Tai Mei Tuk (TBC)
3	8 Nov	2:00 p.m. – 5:00 p.m.	Room 105, HKAGE
4		6:00 p.m. – 9:00 p.m.	Ma Wan / Tai Mei Tuk (TBC)

Remarks:

- There will be two evening classes where we will visit other outdoor sites for stargazing. The instructor has already arranged a chartered shuttle bus for pick-ups between the Academy and class venues. Evening classes will be dismissed at the Academy. Details will be explained during class.
- The evening stargazing activity classes maybe cancelled or postponed to a later date accordingly due to inclement weather, please watch out for the instructor's arrangements.

Suitable for

- S3 to S6 HKAGE student members in 2025/26 school year
- Class size: 35

Pre-requisite

No special prerequisites are needed

Medium of Instruction

Cantonese with English Handouts

Screening

Please answer the screening questions in the online application form.

*The screening questions are designed to help the applicant understands the course level and the course content. The questions must be answered by the student applicant and it can only be attempted once. The answers cannot be changed once the application is submitted. Selection is based on students' performance in answering the questions. Only students who can demonstrate motivation and knowledge of astronomy in the screening questions can be enrolled in the programme.

Certificate

E-Certificate will be awarded to gifted students who have:

- attended at least 3 sessions; and
- completed all the assignments with satisfactory performance.

Enquiries 3940 0101 programme@hkage.org.hk