

Subject: AI-Empowered Astronomy for Open Science, Jan 5-7 2025, Hangzhou, China
Organized by Zhejiang Lab and National Astronomical Observatories, Chinese Academy of Sciences (NAOC)

Nov 5th, 2024

Dear Madam/Sir,

On 25 August 2023, the UN General Assembly proclaimed the period 2024-2033 as the International Decade of Sciences for Sustainable Development. In UNESCO's Strategic Plan for the Implementation of the Science Decade, the Decade stakeholders are invited to develop, implement and engage in a variety of initiatives, actions, programs and other endeavors to achieve a goal that, by 2033, open science is widely and equitably used to democratize scientific processes and ensure access to scientific knowledge.

One suitable subject for open science is astronomy, which has now entered a new AI-empowered era of time-domain and multi-messenger observations of the dynamical universe. We anticipate new breakthroughs in revealing new physics on the extreme conditions of high energy, density, gravity and magnetic fields. But this will not be possible without collaborative international efforts by all astronomers and AI scientists. As an effort along this line, Zhejiang Lab and NAOC proposed an international big science program, the Global Open Transient Telescope Array (GOTTA), to UNESCO with the ambition to promote collaborative worldwide infrastructure for time-domain astronomy driven by AI.

Driven by the urgent need to build consensus in the community to develop open and interdisciplinary solutions, Zhejiang Lab and NAOC will jointly host a conference, titled AI-Empowered Astronomy for Open Science, on 5-8th Jan 2025 at Zhejiang Lab, Hangzhou. This meeting will discuss how to build AI infrastructures to empower astronomical mega projects such as GOTTA, how these infrastructures will promote the ongoing paradigm shift in research, outreach and education, how to build a platform for resource exchanges, and how to implement world-wide such sustainable and equitable solutions.

We cordially invite you to attend this conference. A draft agenda is attached to the end of this letter. If interested, please register on the website <http://www.unescomeeting2025.zhejianglab.com>. Or respond to Mrs. Tingni Cai (caitn@zhejianglab.com) directly for more information on the conference, suggestions on the agenda including talks and discussion panels, or assistance on travel, accommodation and visa application.

We look forward to meeting you in the beautiful Hangzhou the coming January.
Best wishes,

Jian Wang

Jifeng Liu

Director General of Zhejiang Lab

Director General of NAOC