



Conference on Advanced Topics and Auto Tuning in High-Performance Scientific Computing

Time: 2026/03/20-21

Venue: R515, Cosmology Bldg., NTU

Aim & Scope:

The 2026 Conference on Advanced Topics and Auto-Tuning in High-Performance Scientific Computing (ATAT 2026) continues the series' mission to provide a focused forum for discussing recent progress and emerging challenges in high-performance scientific computing. The conference aims to bring together researchers and practitioners from academia, laboratories, and industry to share their latest achievements in algorithm design, performance modeling, system optimization, and auto-tuning techniques for complex computational systems. Building upon the themes of previous years, ATAT 2026 places particular emphasis on integrating artificial intelligence (AI), machine learning, and data-driven approaches into performance optimization and adaptive computation across heterogeneous architectures, including multi-core CPUs, GPUs, and domain-specific accelerators. A new and distinctive highlight of this year's conference is the inclusion of a dedicated session on quantum computing, covering topics such as quantum algorithms, quantum-classical hybrid workflows, quantum circuit optimization, and performance characterization of quantum architectures. The conference welcomes contributions that explore algorithm-architecture co-design, performance portability, and energy efficiency, as well as innovative auto-tuning methods that enhance robustness, scalability, and reproducibility in next-generation scientific and engineering applications.

Keynote Speaker: Hung-Chi Kuo National Taiwan University

Invited Speakers:

International Speakers

Takeshi Fukaya	Hokkaido University
Toshiyuki Imamura	RIKEN Center for Computational Science
Takahiro Katagiri	Nagoya University
Koki Masui	The University of Osaka
Kengo Nakajima	The University of Tokyo
Takeshi Nanri	Kyushu University
Satoshi Ohshima	Kyushu University
Kenji Ono	Kyushu University
Katsuhisa Ozaki	Shibaura Institute of Technology
Tomohiro Suzuki	Yamanashi University
Hiroyuki Takizawa	Tohoku University
Yuki Uchino	RIKEN

Local Speakers

Hong-Bin Chen	National Cheng Kung University
Lu-hung Chen	National Chung Hsing University
Tsung-Hui Huang	National Taiwan University
Bing-Ze Lu	National Chung Cheng University
Ka-Lok Ng	Asia University
Yang-Yao Niu	Tamkang University
Chia-Ho Ou	National Pingtung University / Tohoku University
Wei-Hsiang Wang	National Chung Hsing University
Chin-Tien Wu	National Yang Ming Chiao Tung University
Yu-Ting Wu	National Cheng Kung University
Yung-Yu Zhuang	National Central University

Organizers:

Ray-Bing Chen	National Tsing Hua University
Feng-Nan Hwang	National Central University
Takahiro Katagiri	Nagoya University
Chung-Gang Li	National Cheng Kung University
Satoshi Ohshima	Kyushu University
Yu-Heng Tseng	Institute of Oceanography & Ocean Center, National Taiwan University
Weichung Wang	National Taiwan University
An-Cheng Yang	National Center for High-Performance Computing

Contact:

Peggy Lee peggylee@ncts.ntu.edu.tw
Jenny Wang jennywang2@ntu.edu.tw

Event QR-Code

