# 2023 Conference on Advanced Topics and Auto Tuning in High-Performance Scientific Computing

**Date:** March **24-25,** 2023

**Venue:** NCU Center for Mathematics and Theoretical Physics, Chien-Shiung Building (Science Building #4) 2nd floor (S4-209), National Central University

## Aim & Scope

The 2023 Conference on Advanced Topics and Auto Tuning in High-Performance Scientific Computing (ATAT 2023) focuses on the scientific impacts of the latest computer architectures and approaches to achieve high-performance computing on these leading-edge computers. Advances in many-core architectures and high-end computers have revealed their significance in scientific discoveries and engineering achievements. However, the complexity of these newly developed computers also leads to contemporary challenges to achieving the best efficiency of highly promising computational capabilities. The conference encourages interdisciplinary communications between researchers from applied mathematics, statistics, computer science, physical sciences, engineering, and industry leading to innovations and breakthroughs in this exciting field. The main themes include, but are not limited to, simulations, numerical methods, applications, hardware, and particularly software and algorithm auto-tuning via statistical methods.

## Plenary Speaker

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| Chau-Lyan Chang | 張朝亮 | National Center for High-Performance Computing |

## Invited Speakers

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|---|---|---|
| How-Wei Chen | 陳浩維 | National Central University |
| Jen-Hao Chen | 陳人豪 | National Tsing Hua University |
| Meng-Huo Chen | 陳孟豁 | National Chung Cheng University |
| Tsung-Hui Huang | 黃琮暉 | National Tsing Hua University |
| Takahiro Katagiri | | RIKEN R-CCS, Nagoya University |
| ChungGang Li | 李崇綱 | National Cheng Kung University |
| Kengo Nakajima | | The University of Tokyo |
| Satoshi Ohshima | | Kyushu University |
| Katsuhisa Ozaki | | Shibaura Institute of Technology |
| Hiroyuki Takizawa | | Tohoku University |
| Eh Tan | 譚諤 | Academia Sinica |
| Takeshi Terao | | RIKEN R-CCS |
| Yu-Heng Tseng | 曾于恆 | National Taiwan University |
| Chin-Tien Wu | 吳金典 | National Yang Ming Chiao Tung University |
| An-Cheng Yang | 楊安正 | National Center for High-Performance Computing |

## Student Speakers

| | | |
|---|---|---|
| Duc Quoc Huynh | 黃德國 | National Central University |
| Ivan Luthfi I. | 盧斯非 | National Central University |
| Ji Qi | | Kyushu University |
| Yuki Uchino | | Shibaura Institute of Technology |
| Shiyao Xie | | Kyushu University |
| Hao-Lun Yeh | 葉浩倫 | National Central University |

## Organizing Committee

| | | |
|---|---|---|
| How-Wei Chen | 陳浩維 | National Central University |
| Ray-Bing Chen | 陳瑞彬 | National Cheng Kung University |
| Feng-Nan Hwang | 黃楓南 | National Central University |
| Takahiro Katagiri | | University of Nagoya |
| Reiji Suda | | The University of Tokyo |
| Weichung Wang | 王偉仲 | National Taiwan University |
| YungYu Zhuang | 莊永裕 | National Central University |

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**Event Web QR-Code**

**NCTS**
National Center for Theoretical Sciences