

# INSTITUTE OF ADVANCED STUDIES

NANYANG TECHNOLOGICAL UNIVERSITY

Catalyse high-impact research | Transcend disciplinary boundaries | Expand knowledge & education frontiers

## FEATURED ARTICLES

### When Nanoscience met Medicine

#### 2024 Kavli Prize in Nanoscience



The prestigious biennial prize was awarded to Prof Robert Langer (MIT), Prof Armand Paul Alivisatos (University of Chicago) and Prof Chad Mirkin (Northwestern University) for their groundbreaking work in using synthetic nanoscale materials for drug delivery, bioimaging, and bionanotechnology.

[Read more](#)

### Navigating Science to Business - A Fireside Chat with Dr Serg Bell



Dr Serg Bell, Founder of Constructor Group and Acronis, candidly shared his inspiring journey, from his humble beginnings as a young scientist during the collapse of the Soviet Union to becoming a cosmopolitan entrepreneur and the founder of multiple successful IT companies and investment firms.

[Read more](#)

## EVENT HIGHLIGHTS

### IAS Discovery Science Seminars Jointly Organised with the Graduate Students' Clubs



#### Math for AI: Can Mathematics provide a Solid Foundation for AI? by Assoc Prof Xia Kelin (SPMS)



Prof Xia shared his groundbreaking work on using advanced mathematics to tackle challenges in AI-based learning models, particularly efficient data representation and featurisation. He emphasised the crucial role of advanced math in developing AI models, especially in molecular sciences.

[Read more](#)

#### Unlocking Arabica Coffee's Secret: A Genomic Journey to Its Past and Future by Assistant Prof Jarkko Salojärvi (SBS)



Prof Salojärvi's seminar gave an in-depth look at the 2017 genomic studies that uncovered Arabica's evolutionary history, identified genetic markers for disease resistance, and paved the way for future breeding programs, highlighting the importance of genomic research in safeguarding key crops like coffee.

[Read more](#)

## UPCOMING EVENTS



### IAS Frontiers Conference on Genome Engineering

13 to 15 November 2024

This conference celebrates the revolutionary CRISPR-Cas system and its transformative impact on biotechnology and biomedical science, from microbial immunity to Nobel Prize-winning genome editing applications. It will feature over 30 renowned international speakers who will share their latest breakthroughs and insights on cutting-edge topics:

- Understanding Fundamental Biology
- Exploiting Nature
- New Technologies
- Therapeutics
- High-throughput Screens
- Plant Engineering
- AI and Data Science

[Register now](#)



### 5th International Workshop on Quantum and Topological Nanophotonics (QTN)

Nanyang Technological University, Singapore  
19 – 21 November 2024

[www.nanophotonics.sg/news-event/qtn-2024](http://www.nanophotonics.sg/news-event/qtn-2024)

### 5th International Workshop on Quantum and Topological Nanophotonics

19-21 Nov 2024, NTU

[Workshop website](#)

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