INSTITUTE OF ADVANCED STUDIES
NANYANG TECHNOLOGICAL UNIVERSITY

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

FEATURED ARTICLES

Metal-Organic Frameworks Open New Rooms for Chemistry

Professors Susumu Kitagawa, Richard Robson, and Omar Yaghi have revolutionised chemistry through metal–organic frameworks — porous "molecular buildings" driving breakthroughs in clean water, carbon capture, and medicine, and opening new frontiers in molecular science.

Read more

18th International Science Youth Forum

The Forum, themed "Curiosity Unlocked: How Questions Drive Discovery in the Age of AI," brought together talented high school students from around the world to explore diverse scientific fields through interactions with Nobel Laureates and eminent speakers.

Read more

EVENT HIGHLIGHTS

IAS@NTU Lee Kong Chian Distinguished Professor Public Lectures

Redesigning Proteins and Regenerative Medicine with AI

Discover how Nobel-winning science and AI-driven biology are reshaping medicine and sustainability, as Prof David Baker (Nobel Prize in Chemistry 2024) and Prof Hannele Ruohola-Baker share bold insights into deep-learning protein design, regenerative therapies, and the future of health innovation.

Read more

Powering a Greener Future: Semiconductor Innovations and AI Solutions

Dive into insights from Prof Bantval Jayant Baliga (Millennium Technology Prize 2024) and Prof Torsten Hoefler (ACM Prize in Computing 2024) as they reveal how semiconductor innovation is driving the green energy transition and how computational science is tackling real-world challenges to build climate resilience.

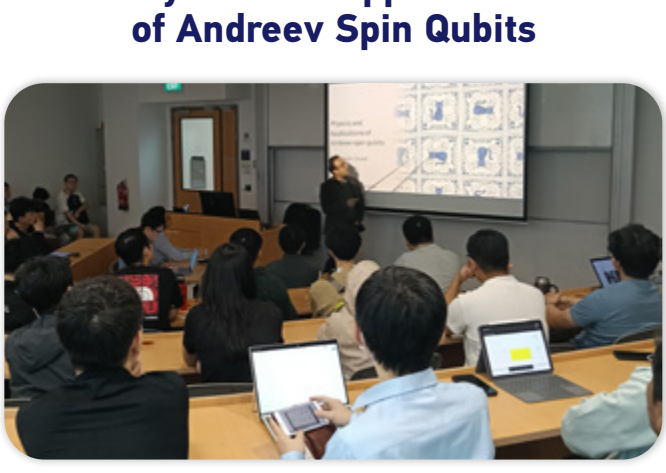
Read more

Quantum Mechanics after One Hundred Years, and the 'Second Quantum Revolution' Today

Discover how a century-old quantum mystery is powering tomorrow's technologies, as Prof Duncan Haldane (Nobel Prize in Physics 2016) explains why quantum mechanics matters more than ever — from entanglement to topological matter driving the "Second Quantum Revolution."

Read more

Physics and Applications of Andreev Spin Qubits



The Quantum Horizons seminar showcased advances in quantum phenomena, with Prof Valla Fatemi presenting Andreev spin qubits — hybrid, noise-resilient quantum bits that promise longer lifetimes and a glimpse into future quantum hardware and computing.

Read more

Should Children Learn to Read and Write – or Is Learning to Talk to AI Enough?

At the STEM Graduate Colloquium with CCDS GSC, Prof Sarit Kraus explored the relevance of reading and writing in the AI era, emphasising human–AI collaboration, critical thinking, and responsible AI use.

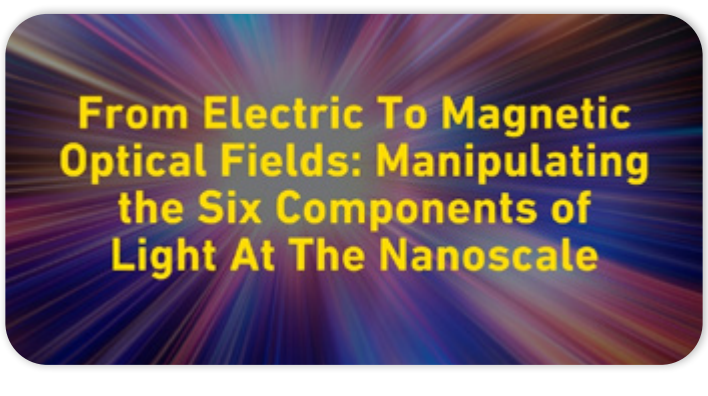
Read more

Singapore Bioscience Symposium

Supported by the IAS Frontiers Conference Series, the inaugural Singapore Bioscience Symposium brought together experts to explore plant biomolecular condensation and signalling, fostering interdisciplinary discovery and highlighting how future bioscience research can shape Singapore and beyond.

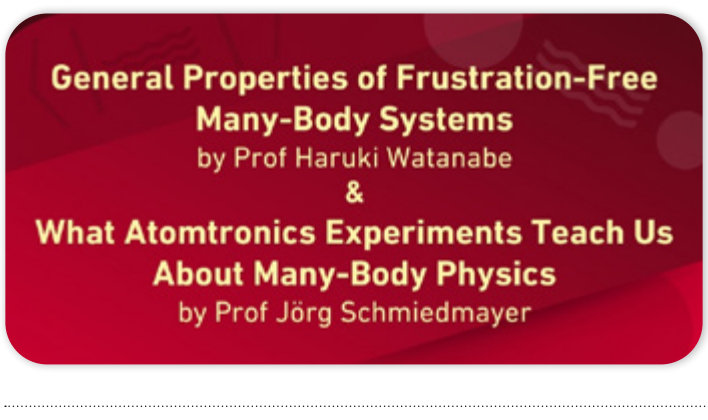
Read more

UPCOMING EVENTS



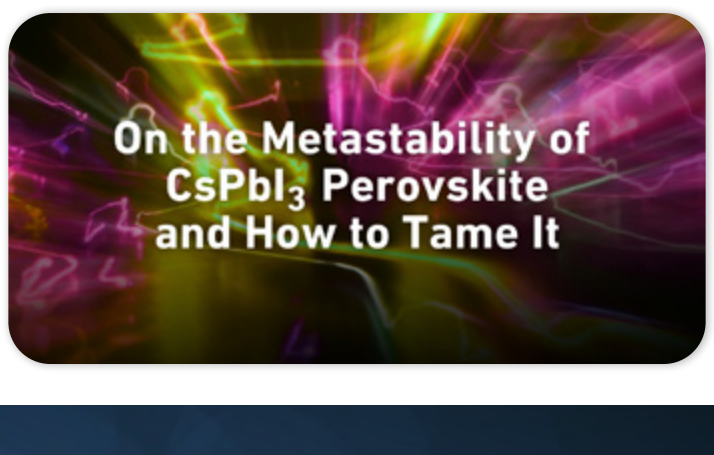
IAS STEM Graduate Colloquium by Prof Mathieu Mivelle
5 February 2026, The Arc LHN-LT

Register now



IAS Frontiers Seminars: Quantum Horizons
Prof Haruki Watanabe, 9 February 2026
Prof Jörg Schmiedmayer, 23 March 2026
SPMS MAS Executive Classroom 1

Register now



IAS STEM Graduate Colloquium by Dr Julian Steele
24 February 2026, North Spine LT5

Register now

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For enquiries, email us at **iasevents@ntu.edu.sg**