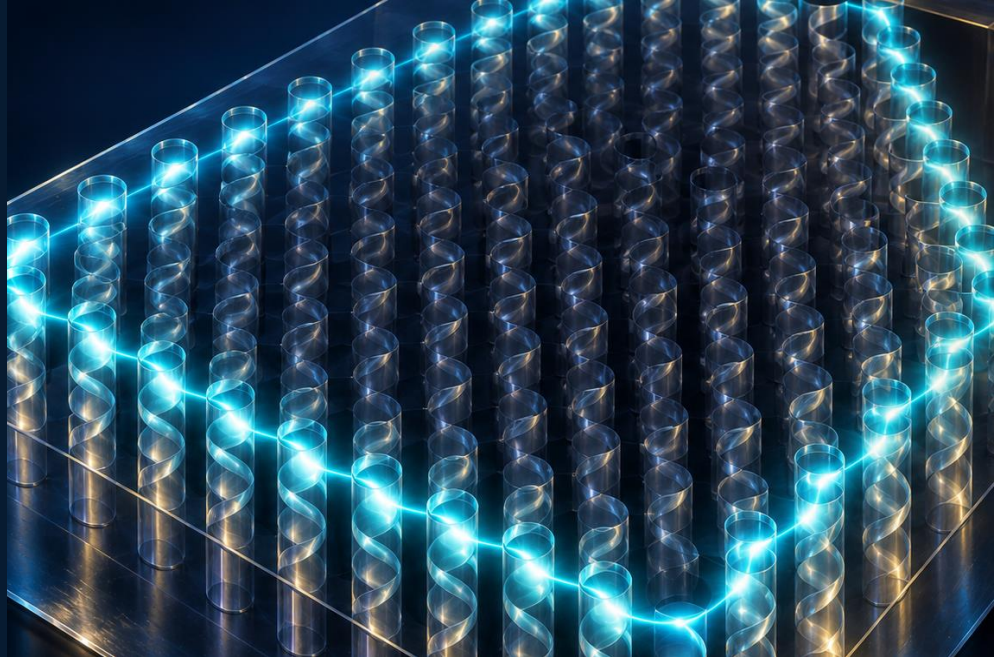


Hung Hing Ying
Distinguished Colloquia Series:

Two Frontiers in Photonics

Supported by Hung Hing Ying Distinguished Visiting
Professorship in Science and Technology under the
Distinguished Visiting Scholars Scheme



SPEAKER

Professor Mordechai (Moti) Segev

Hung Hing Ying Distinguished Visiting Professor
Robert J. Shillman Distinguished Professor of Physics
and Electrical Engineering
Technion – Israel Institute of Technology



[Speaker's Bio &
Event Details](#)

1

PHYSICS COLLOQUIUM

Topological Photonics

DATE

22 September 2026 (Tue)

TIME

17:30–18:30

VENUE

**Wang Gungwu Lecture Hall
P4, Graduate House**

Over the years, this field has given rise to new fundamental ideas of its own, offering exciting applications that could become real technologies in the near future, including topological lasers and topological protection of quantum light. It is currently one of the most active research areas in optics and undoubtedly one of the spearheads of research in topological physics at large. We are now more than a decade in, and it is time to ask: Where do we go from here?

This talk will review the fundamentals of topological photonics, highlight several key discoveries, and attempt to address the intriguing question of where the field is evolving.



[REGISTER](#)

2

PHYSICS COLLOQUIUM

Photonic Time Crystals and Light–Matter Interactions Therein

DATE

24 September 2026 (Thu)

TIME

16:30–17:30

VENUE

**CYPP3, LG1, Chong Yuet
Ming Physics Building**

The lecture will introduce the fundamentals of PTCs and the classical and quantum features of light–matter interactions. Most notably, light emission in PTCs enables widely tunable lasers that do not rely on atomic resonance and draw energy from temporal modulation of the medium. Another important feature is the quantum aspects, which yield a plethora of fundamental features, ranging from generating pairs of entangled photons to controlling spontaneous emission through temporal modulation and creating 2D cluster states.

The talk will also cover experimental progress towards order-unity modulation of the refractive index faster than a single cycle, including the observation of time reflection at optical frequencies, and discuss nonlinear optics and new mechanisms for high-harmonic generation in solids.



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ALL are welcome