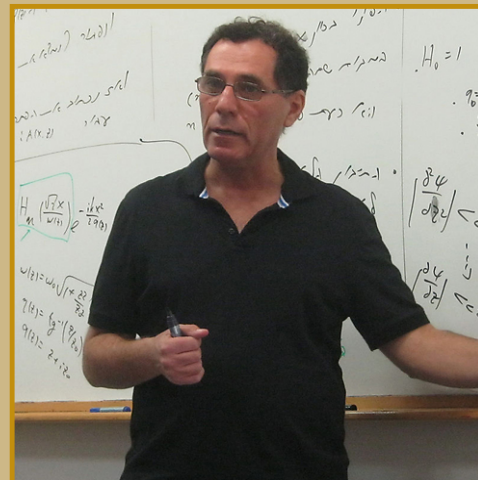


Photonic Time Crystals Crash Course with

Prof. Moti Segev

Neil Armstrong Distinguished Visiting fellow



When: February 21, 10 am-11 am EST

Where: Birck Nanotechnology Center, Room 1001

Or join virtually via Zoom:

<https://purdue-edu.zoom.us/j/98967423987>

Photonic Time Crystals (PTCs) are dielectric media whose refractive index is modulated periodically in time at time scales of an optical cycle. These systems conserve momentum but not energy, and are characterized by momentum bands and bandgaps, where the amplitudes of their eigenmodes can increase (or decrease) exponentially. Prof. Segev will introduce the fundamentals of PTCs, discuss the topological features of waves propagating in PTCs, localization in PTCs containing disorder, and spatiotemporal photonic crystals as well as their impact on both the fundamental science of light and photonic applications. Photonic Time Crystals (PTCs) are dielectric media whose refractive index is modulated periodically in time at time scales of an optical cycle. These systems conserve momentum but not energy, and are characterized by momentum bands and bandgaps, where the amplitudes of their eigenmodes can increase (or decrease) exponentially.

Mordechai (Moti) Segev is the Robert J. Shillman Distinguished Professor of Physics, at the Technion, Israel. He received his BSc and PhD from the Technion in 1985 and 1990. He joined Princeton as Assistant Professor in 1994 and became Professor in 1999. Then Moti went back to Israel and was appointed as Distinguished Professor in 2009.