



Solid State Institute
המכון למצב מוצק

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סמינר

Kerr-microresonator solitons for ultraprecise measurements

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Abstract

Optical-frequency combs are versatile tools for measuring time, identifying chemicals, sensing distance, and supporting quantum-information science. A new direction is to produce frequency combs through intriguing nonlinear behaviors of light in Kerr resonators. Experiments with whispering-gallery-mode and waveguide-ring configurations have been highly productive, exploring the formation, properties, and uses of soliton pulses that are the nonlinear eigenstate of the resonator. I will discuss Kerr-frequency-comb experiments at NIST that explore ultraprecise measurements, including optical synthesis and optical-atomic clocks, and emerging nonlinear solon dynamics.

ההרצאה תתקיים ביום רביעי, ה-3.4.19 בשעה 12:30
באודיטוריום המכון למצב מוצק, קומת כניסה

The lecture will take place on Wednesday, 3.4.19 at 12:30
at the Solid State Institute auditorium, entrance floor

Host: Assistant Professor Yoav Sagi