

IQSE AMO QO Seminar Series

Wednesday, April 27th, 11:30 am ZOOM &
IQSE seminar room (MPHY 578)

Pizza will be served for IQSE members at 11:00 am. The talk will start around 11:30 am

Gershon Kurizki

Weizmann Institute of Science

How to bridge thermodynamics and quantum mechanics in heat machines?

EVENT DETAILS: In recent years we have examined various quantum mechanisms that may boost the performance of heat machines: squeezed baths, coherent pistons, Dicke cooperative working media and more. Yet all these mechanisms have classical analogs. More fundamentally, none of them can be described unitarily: all heat machines to date are dissipative open systems. We have now broken away from this paradigmatic description of heat machines and suggest instead few-mode coherent nonlinear systems that are describable unitarily but act as genuine heat machines. Their simplest version is a nonlinear Mach-Zehnder interferometer, which allows the bridging of thermodynamic and properly quantum descriptions.

ZOOM information:

<https://tamu.zoom.us/j/98156251523?pwd=QVdSdGxtL1UyY0g1L083SU5QR0QrUT09>

Meeting ID: 981 5625 1523

Passcode: 297578

One tap mobile

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