

IQSE AMO QO Seminar Series

Tuesday, February 28th, 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

Dr. Arash Azizi
(IQSE, Texas A&M University)

Holography, Wormholes, and ER=EPR

EVENT DETAILS: Maldacena proposed a bold suggestion in 1997: Gravity (e.g., Anti-de Sitter spacetime) can be realized as a gauge theory (e.g., Conformal Field Theory) in one dimension less. In other words, gravity is a holographic dual of quantum field theory without gravity. There has been an enormous number of tests for this conjecture. Furthermore, Maldacena and Susskind in 2013 conjectured ER=EPR. ER stands for Einstein-Rosen bridge, i.e., wormhole, and EPR is referring to the famous Einstein-Podolsky-Rosen argument, i.e., entanglement. According to their conjecture, every entangled state, even the simple singlet state of two spins can be realized by a wormhole. In this talk, I will give a general review on these exciting topics.

ZOOM information:

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

Meeting ID: 981 5625 1523

Passcode: 297578

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