

# Physics Colloquium

Prof. Jerome Licini

## **“Physics Education Research: Initiative at Lehigh University”**

Physics Education Research (PER) is a new and growing field that moves beyond “can students answer the test questions” to a systematic and analytical inquiry into what students are actually learning and how they learn it. It was the spark behind discipline-based educational research in other STEM fields and beyond. This talk will present an overview of Professor Licini’s recent PER initiative here at Lehigh University. Topics will include the development of skill evaluation instruments, computer simulations, and lecture demonstrations.

Jerome Licini received his undergraduate degree from Princeton University and his Ph.D. from M.I.T. He gained industry experience during positions at IBM and Bell Labs, then continued as a consultant with the Lehigh-sponsored Ben Franklin Technology Partners, earning three US and multiple international patents. His initial work at Lehigh was on quantum transport in semiconductor devices, including identifying Universal Conductance Fluctuations in ultra-narrow MOSFET devices and two-photon excitation of defects in gallium arsenide. Two years ago, he initiated a Physics Education Research program which has already yielded highly visible results. He has extensive experience teaching the introductory physics sequence here and currently serves as the Associate Chair of the Lehigh University Physics Department.

**Thursday November 19th at 4:25 via Zoom**

**If you are outside the Lehigh Physics Department, please email  
Marina Long ([mal516@lehigh.edu](mailto:mal516@lehigh.edu)) for a link.**