

University of Crete **Department of Physics**

Physics Colloquium

Thursday, 14 October 2021 | 17:00 – 18:00, Online with Zoom

PT-Symmetry

Prof. Carl M. Bender

Department of Physics, Washington University in St. Louis, USA

ABSTRACT

By using complex-variable methods one can extend conventional Hermitian quantum theories into the complex domain. The result is a huge and exciting new class of non-Hermitian parity-time-symmetric (PT-symmetric) theories that still obey the fundamental laws of quantum mechanics. These new theories have remarkable physical properties, which are currently under intense study by theorists and experimentalists. Many theoretical predictions have been verified in recent beautiful laboratory experiments.