

PHOTONICS SEMINAR

Dr. Demetrios Christodoulides

Parity Time Symmetry and Supersymmetry in Optics

Faculty Host: Dr. Siddharth Ramachandran

March 4, 2015

11 a.m. -12 p.m.

Room 339

Photonics Center

8 Saint Mary's Street

*Refreshments will
be served!*



Optical parity-time (PT)-symmetric structures utilize gain and loss in a balanced fashion in order to achieve a desired functionality. Dr. Christodoulides will provide an overview of recent developments in the newly emerging fields of discrete symmetries, with particular emphasis on PT-symmetric and supersymmetric optics.

Dr. Demetrios Christodoulides is the Cobb Family Endowed Chair and Pegasus Professor of Optics at CREOL-the College of Optics and Photonics at the University of Central Florida. He received his Ph.D. degree from Johns Hopkins University in 1986, and he subsequently joined Bellcore as a post-doctoral fellow at Murray Hill. Between 1988 and 2002, he was with the faculty of the Department of Electrical Engineering at Lehigh University. His research interests include linear and nonlinear optical beam interactions, synthetic optical materials, optical solitons, and quantum electronics. His research initiated new innovation within the field, including the discovery of optical discrete solitons, Bragg and vector solitons in fibers, nonlinear surface waves, and the discovery of self-accelerating optical (Airy) beams. He has authored and co-authored more than 300 papers. He is a Fellow of the Optical Society of America and the American Physical Society. In 2011, he received the R.W. Wood Prize of OSA. He is listed as a Thompson Reuters ISI highly cited researcher.



Photonics Center