

ICFO COLLOQUIUM ALEXANDER GAETA 'Microresonator-Based Optical Frequency Combs'

ALEXANDER GAETA

June 07, 2019

Friday, June 7, 2018, 12:00. ICFO Auditorium

ALEXANDER GAETA

David M. Rickey Professor, Department of Applied Physics and Applied Mathematics, Columbia University$$Alex Gaeta received his Ph.D. in 1991 in Optics from the University of Rochester. He joined the faculty in the Department of Applied Physics and Applied Mathematics at Columbia University in 2015, where he is the David M. Rickey Professor. Prior to this, he was a professor in the School of Applied and Engineering Physics at Cornell University for 23 years. He has published more than 230 papers in quantum and nonlinear optics. He co-founded PicoLuz, Inc. and is the founding Editor-in-Chief of Optica. He is a Fellow of the Optical Society of America and of the America Physical Society.

The generation of optical frequency combs in microresonators has attracted intense interest over the past decade. This can be attributed to their potential for an ultralow power,

chip-based implementation and the beautiful, complex physics underlying their operation. I will describe our recent work exploring the dynamical behavior of microresonator combs, their application to spectroscopy, and development of a fully integrated device.

Friday, June 7, 2018, 12:00. ICFO Auditorium