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Mario Bertolotti
Alexei M. Zheltikov
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Introduction

This volume provides a collection of papers presented at the Nonlinear Optics and Applications XI conference, held as a part of SPIE Optics + Optoelectroncs in Prague (Czech Republic) on 1–4 April 2019. The key topics highlighted in both this year's conference program and in this volume of SPIE Proceedings include ultrafast phenomena in nonlinear optics, nonlinear optics of chiral media and systems, nonlinear materials, terahertz technologies, nonlinear-optical effects on the nanoscale, quantum nonlinear optics, as well as plasmonics. The latest Nobel Prize in physics being among the most powerful motives of the entire meeting, much of the focus of Nonlinear Optics and Applications XI was on nonlinear-optical applications of high-peak-power laser pulses generated using the chirped-pulse amplification technology.

As a special event, this year's conference program featured a memorial session dedicated to Professor Joseph Haus, our dear colleague and friend, who passed away so prematurely a few months before the conference. Professor Haus was widely recognized as the world's leading expert in nonlinear optics and novel photonic materials, including, most notably, photonic crystals and optical metamaterials. A fellow of SPIE, OSA, and APS, Professor Haus on multiple occasions co-chaired and served on program committees for major international meetings on nonlinear optics and photonics. A man of great courage and a heart of pure gold, Joe will be remembered and missed dearly.

For many years, Joseph Haus has served as a Co-Chair of the Nonlinear Optics and Applications conferences. We shall proceed with our work and with this conference with Joe in our minds and our hearts and with Joe's words of hope and wisdom "the best is yet to come."

Mario Bertolotti
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