

Spontaneous Parametric Down-Conversion: from Micro- to Nanoscale

A. S. Solntsev

School of Mathematical and Physical Sciences, Faculty of Science,

University of Technology Sydney, Australia.

Abstract: The most common mechanism for entangled photon generation in optics is the second-order nonlinear process of spontaneous parametric down-conversion. I will provide a brief overview of recent developments in the area, moving from photonic chips to nanophotonics.



Biography: Alex Solntsev has graduated with degrees in Physics and Education from Moscow State University and received a PhD from Australian National University. He worked as a Researcher at ANU until joining the University of Technology Sydney and starting a Nonlinear Optics lab as a DECRA Fellow. Now he leads research in nonlinear optics and works as an Associate Head of School Research for Mathematical and Physical Sciences.