

Mordechai Segev

Prof. Mordechai Segev is the Robert J. Shillman Distinguished Professor of Physics at the Technion, Israel. He received his B.Sc. and PhD from the Technion in 1985 and 1990, respectively. He spent one year at Caltech as a post-doc and two more years as a Senior Research Fellow. He joined Princeton in September 1994 as an Assistant Professor, becoming an Associate Professor in 1997, and a Professor in 1999. In 1998, he went back to Israel and joined the Technion, eventually resigning from Princeton in 2000.

Prof. Segev's research interests are mainly in Nonlinear Optics, Solitons, Sub-wavelength Imaging, Lasers and Quantum Electronics. He has more than 300 publications in refereed journals, many book chapters, and has given more than 150 invited, keynote, and plenary presentations at conferences. According to ISI Web of Knowledge, his H-index is 76 with more than 23,000 citations, and an average of more than 60 citations per paper (H-index 92, with ~32,000 citations by Google Scholar).

Among his most significant contributions are the discoveries of photorefractive solitons and of random-phase solitons, the first observation of 2D lattice solitons, the first experimental demonstration of Anderson localization in a disordered periodic system, demonstrating the first photonic topological insulator, and the invention of the concept of sparsity-based subwavelength imaging and super-resolution. Recently, Prof. Segev's group has demonstrated the possibility of laser emission by a topological insulator.

Prof. Segev is a Fellow of the Optical Society of America (OSA) and of the American Physical Society (APS). He has won several major international and national awards, among them the 2007 Quantum Electronics Prize of the European Physics Society (highest award of the European Physical Society in optics / lasers / quantum electronics), the 2009 Max Born Award (OSA's most prestigious professional award), and the 2014 Arthur Schawlow Prize (highest APS award in lasers physics). On the national level, he won the 1995 Sloan Research Award in Physics (USA) and the 2008 Landau Prize (Israel).

In 2011, Prof. Segev was elected to the Israel Academy of Sciences and Humanities, and in 2014 he won the Israel Prize in Physics. In 2015, Prof. Segev was elected to the National Academy of Science (NAS) as a foreign associate. On the Technion level, he won 2003 the Henry Taub Prize for Research Excellence, and twice the Hershel Rich Innovation Award (2007, 2013). In 2008, he won the prestigious Advanced Grant from the European Research Council (ERC) in the first round. He served as the General Chair and Program Chair of several international conferences, and two terms as the Topical Editor on Nonlinear Optics in Optics Letters. In 2009, he served as the General Chair of IQEC/CLEO, and as the Chair of the Awards Committee of the Quantum Electronics Prize. Since 2009, he is a Distinguished Professor at Technion.