

EOS Topical Meeting on Waves in Complex Photonics Media: Fundamentals and Device Applications

4 June 2018 - 7 June 2018, Anacapri, Island of Capri, Italy

Invited talk: 35min talk +10min Q&A

Contributed talk: 15min + 5min Q&A

Monday June 4

Opening and on-site registration, 9 - 10		
<i>Light in Random Media, 10.00 -12.35</i>		
Ad Lagendijk	<i>Disordered media and photonic crystals</i>	Invited
Sergey Skipetrov	<i>Anderson localization of classical waves</i>	Invited
Walter Pfeiffer	<i>Anderson localization of light and perfect absorption in nanotextured absorber layers</i>	Invited
Fabrizio Sgrignuoli	<i>Vector Waves Localization in Aperiodic Vogel Spirals</i>	
LUNCH, 12.35 – 14.00		
<i>Topological phases and novel phenomena, 14.00 – 18.10</i>		
Nader Engheta	TBA	Invited
A. Hack Sjoerd	<i>"Cartesian light": unconventional propagation of light in a 3D crystal of cavities</i>	
Otto Muskens	<i>Extreme scattering and extraordinary nonlinearities of light in complex media</i>	
COFFEE 15.30 - 16.00		
Eric Akkermans	<i>Topological properties of quasi-periodic tilings - From Structure to Spectrum</i>	Invited
Romolo Savo	<i>Invariance of the mean path length in light-scattering media</i>	
Felipe Pinheiro	<i>Applications of the Green's matrix method: from random to aperiodic photonic media</i>	Invited
Sushil Mujumdar	<i>Anderson localization at the Kondo-hybridisation gap in aperiodic plasmonic coupled-resonator waveguides</i>	
WELCOME COCTAIL, 18.30		

Tuesday June 5

Disordered nano-optics and novel phenomena, 9.00 -12.35		
Nikolay Zheludev	<i>Metamaterials, anapoles and flying donuts</i>	Invited
Jacob Khurgin	<i>Benefits of disorder in in two-dimensional arrays of metal nanoparticles</i>	Invited
Evgeniy Narimanov	<i>Hyperbolic modes of a metal-dielectric interface</i>	
COFFEE, 10.50 – 11.30		
Tsampikos Kottos	<i>Time-Reversal Symmetry and its Applications to Waveform Shaping and Photonic Limiters</i>	Invited
Lorenzo Pattelli	<i>Massively-parallel calculation of light scattering by large ensembles of spheres</i>	
LUNCH, 12.35 – 14.00		
Disordered devices and novel phenomena, 14.00 – 18.20		
Azriel Genack	<i>Edge states in disordered topological insulator</i>	Invited
Mikael Rechtsman	<i>Topological photonics: Weyl points and protected defect modes</i>	Invited
Haiyan Wang	<i>Information encoding in aperiodic volumetric scattering optics</i>	
COFFEE 15.50 - 16.30		
Luca Sapienza	<i>Efficient confinement of visible light in disordered photonic crystals</i>	Invited
Francesco Riboli	<i>Correlation of the Local Density of States in Disordered Photonic Materials</i>	Invited
Simon Félix	<i>Broadband transmission enhancement through an opaque barrier separating symmetric disordered slabs</i>	
DINNER, “Ristorante La Zagara”, Anacapri, 20.30		

Wednesday June 6

<i>Metamaterials and novel platforms, 9.00 -12.35</i>		
Vladimir Shalaev	<i>Catching Light with Metamaterials</i>	Invited
Alezzandra Boltasseva	<i>Emerging materials and approaches for tailorable nanophotonic devices</i>	Invited
Antonio Capretti	<i>Nanophotonic effects in the complex nanostructured morphology of photosynthetic chloroplasts</i>	
COFFEE, 10.50 – 11.30		
Chia Wei Hsu	<i>Transmission eigenchannels in disordered media</i>	Invited
KyeoReh Lee	<i>Direct optical field measurement from a single intensity speckle</i>	
LUNCH, 12.35 – 14.00		
<i>Methods and devices for complex optics, 14.00 – 19.00</i>		
Carlo Forestiere	<i>Spectral Analysis of the Electromagnetic Scattering from Complex Conducting Surfaces</i>	Invited
Igor Tsukerman	<i>Periodic and Non-periodic Structures: Homogenization, Trefftz Functions, Random Matrices</i>	Invited
Simon Labouesse	<i>Random Speckle Illumination Patterns for Compressed Imaging Through a Multimode Fiber</i>	
COFFEE 15.50 - 16.30		
Mark Brongersma	<i>Aperiodic Plasmonic Structures for Spectral Splitting and Photodetection</i>	Invited
Peter Schmelcher	<i>Local Symmetries in Wave Mechanical Systems: From Fundamentals to First Applications</i>	Invited
Concita Sibilía	<i>Effective chiral behavior on self-assembled metasurface by means of linear and nonlinear optical techniques</i>	Invited
Muriel Botey	<i>Field flow control by Complex Media</i>	
POSTER SESSION, 19-20		

Thursday June 7

Nonlinear complex photonics 9 – 12.15		
Gaetano Assanto	<i>Soliton photonics in nematic liquid crystals</i>	Invited
Jonas Kanngießer	<i>Wavefront Shaping in Complex Spectral Domain Optical Coherence Tomography (CSD-OCT)</i>	
Vito Mocella	<i>Bound States in the Continuum: Spin-Polarized Directive Coupling of Light and Near-Field Amplification</i>	
Igor Meglinski	<i>Propagation of Laguerre-Gaussian laser beams in turbid tissue-like scattering medium</i>	
COFFEE, 10.45 – 11.15		
Fabrizio Sgrignuoli	<i>Direct visualization of the scattering resonances in Complex Prime Arrays of dielectric nanoparticles</i>	
Marie-Christin Angermann	<i>A simple model mimicking the white beetles</i>	
Andre de Lustrac	<i>On-chip Metasurface and Metaline based Hybrid Waveguides for Integrated Optics Applications on Silicon</i>	
Taylor Boyd	<i>Shaping electromagnetic fields using complex dielectric media</i>	