

SNAIA 2021 Hybrid Online-Onsite Conference

7-10 December 2021, Paris

Programme

The STEMM Smart Nanomaterials (SNAIA) Conference Series is a unique, established science-to-technology networking platform covering the most exciting emerging fields in smart technologies. It gives the opportunity to present to, share knowledge with, and establish links between leading experts from academia and industry.

This year, the 4th International SNAIA Conference is moving to a hybrid online-onsite format. Despite the current pandemic crisis, we are keeping the in-person part of SNAIA2021 in an unchanged format. At the same time, we understand that many people may still be unable or uncertain about travel. Hence, in parallel, we will provide online streaming and interactive online participation for those who cannot attend the on-site format.

List of Symposia and Sessions on SNAIA 2021:

- **All-Dielectric Nanophotonics** organised by STEMM Global and Alexander Shalin (ITMO University)
- **The Spectroscopy Techniques in Art** organised by STEMM Global, Olga Smolyanskaya (ITMO University), Michel Menu (ITMO's Heritage Science Lab), Vinsent Detalle (Centre for Research and Restoration of the Museums of France, ITMO's Heritage Science Lab)
- **Smart, Functional Fibers and Textiles** organised by STEMM Global and Alexander Gumennik (Indiana University, FAMES Lab)
- **Functional Materials based on 1D and Quasi-1D Structures** organised by STEMM Global and Alexey Bolshakov (MIPT (Moscow), Alferov University)
- **THz Optoelectronics and Photonics** organised by STEMM Global and Andrei Gorodetsky
- **Polaritonics & Plasmonics** organised by STEMM Global and Pavlos Lagoudakis (Skoltech, Southampton)
- **Early Career** organised by STEMM Global and Ventsislav Valev (University of Bath)
- **Nanophotonics** organised by STEMM Global
- **2D Materials** organised by STEMM Global
- **Quantum Optics and Quantum Metrology** organised by STEMM Global
- **Energy Harvesting and Photovoltaics** organised by STEMM Global
- **Smart Nanomaterials** organised by STEMM Global

<i>Time</i>	Tuesday, December the 7th	
<i>Paris (GMT+1)</i>		
9:00	ONSITE Registration	
	Bibliothèque	
9:45	OPENING CEREMONY	
10:00 - 10:35	Plenary Talk: Christian Lerminiaux (<i>Paris Chemie Tech</i>)	
10:35 - 11:10	Plenary Talk: Yuri Kivshar (<i>Nonlinear Physics Center, Australian National University</i>) The rise of Mie-tronics and metaphotonics	
11:10	COFFEE BREAK	
	Bibliothèque	Online
11:35	All-Dielectric Nanophotonics (hybrid I) <i>Chair: Alexander Shalin</i>	11:35 Smart Nanomaterials (online) <i>Chair: Anastasiia Vasylenkova</i>
11:35	Keynote Talk: Martin Wegener (<i>Karlsruhe Institute of Technology</i>) Dielectric metasurfaces for enhanced sensing of chiral molecules	11:35 Raphael Holzinger (<i>Institute for Theoretical Physics</i>) A Nanoscale Continuous Quantum Light Source
12:00	Nahid Talebi (<i>Christian Albrechts University in Kiel</i>) Correlative electron-photon spectroscopy	11:45 Ibrahim Al-Ani (<i>UNSW Canberra</i>) Enhanced Strong Coupling of WSe ₂ monolayer by Bound State in the Continuum
12:15	David Powell (<i>University of New South Wales</i>) Broadband and Achromatic Metasurfaces at Microwave Frequencies	11:55 Adriana Augurio (<i>Queen Mary University of London</i>) Solution-based synthesis of Barium Titanate-Hematite Nanocomposite Thin Films for Enhancement of Photocatalytic Activity
12:30	Andrey Miroshnichenko (<i>UNSW Canberra</i>) Sound Trapping in an Open Resonator	12:05 Andrew Wild (<i>University of Exeter</i>) Optics of Two-Dimensional Materials with Tilted Dirac Cones
12:45	Andrey Sukhorukov (<i>Australian National University</i>) Quantum photon-pair generation and measurement with metasurfaces	12:15 Julijana Cvjetinovic (<i>Skolkovo Institute of Science and Technology</i>) Hybrid materials based on diatomite modified by gold nanoparticles: fabrication and photoacoustic characterization
		12:25 Luis Alberto Sanchez Rodas (<i>National University of Engineering</i>) Enhanced Photocatalytic Activity of ZnO Nanorods/(Graphene Oxide, Reduced Graphene Oxide) for Degradation of Methyl

			Orange Dye
13:00	LUNCH	13:00	LUNCH
Bibliothèque		Online	
14:00	2D Materials (hybrid)	14:00	All-Dielectric Nanophotonics (online I) Chairs: Andrea Fratolocchi and Alexander Shalin
14:00	Keynote Talk: Misha Portnoi (<i>University of Exeter</i>) Momentum alignment of photoexcited carriers in low-dimensional Dirac materials	14:00	Carsten Rockstuhl (<i>Karlsruher Institut of Technology</i>) All-dielectric metasurface with correlated disorder as an anti-reflection coating for Silicon heterojunction solar cells
14:25	Yue Wang (<i>University of York</i>) Nano-antennas Based on Transition Metal Dichalcogenides for Photonics Applications	14:15	Ivan Fernandez-Corbaton (<i>Karlsruhe Institute of Technology</i>) The total helicity of the electromagnetic field and matter
14:50	Sebastian Rieger (<i>Ludwig-Maximilians-University</i>) Optically Induced Coherent Phonons in Bismuth Oxyiodide (BiOI) Nanoplatelets	14:30	Alexey Yulin (<i>ITMO University</i>) Propagation and interaction of intense optical pulses in planar systems with strong light-matter coupling
15:05	Igor Rozhansky (<i>Ioffe Institute</i>) Edge-state tunneling in topological insulators	14:45	Nicolas Bonod (<i>CNRS, Aix Marseille Université, Centrale Marseille, Institut Fresnel</i>) Determining poles, anapoles and optimal materials with approximate Mie coefficients
		15:00	Viktoriia Babicheva (<i>The University of New Mexico</i>) Resonance Width Control in Nanoparticle Lattice with High Index and High Losses
		15:15	Kobus Kuipers (<i>TU Delft</i>) Topological structures in and for light
15:45	COFFEE BREAK & NETWORKING		
Bibliothèque		Online	
16:50	All-Dielectric Nanophotonics (hybrid II) Chairs: Carsten Rockstuhl and Alexander Shalin	16:45	Functional Materials based on 1D and Quasi-1D Structures (online) Chair: Alexey Bolshakov
16:50	Keynote Talk: Andrea Alu (<i>City University of New York</i>) Nonlocal metasurfaces	16:50	Keynote Talk: Georgy Cirlin (<i>Alferov University</i>) - InGaN nanostructures grown by MBE
17:15	Andrea Fratolocchi (<i>King Abdullah University of Science and Technology</i>) Artificial intelligence enabled high-performance ultra-flat optics for vectorial light management: from components to integrated systems	17:15	Alexey Bolshakov (<i>MIPT (Moscow), Alferov University</i>) GaP nanowires: versatile platform for nanophotonics

17:30	Andreas Tittl (<i>LMU Munich</i>) Radial bound states in the continuum for polarization-invariant nanophotonics	17:30	Ivan Shishkin (<i>ITMO University</i>) Characterization of optical and nonlinear properties of individual GaP nanowires using optical tweezers
17:45	Elena Anashkina (<i>Institute of Applied Physics of the RAS</i>) Chalcogenide and tellurite photonic resonators with whispering gallery modes	17:45	Nikolay Sibirev (<i>Saint-Petersburg State University</i>) Dopants impact on planar GaAs nanowires growth
18:00	Andrey Lavrinenko (<i>Technical University of Denmark</i>) Low-index platforms for non-conventional phase matching in third-harmonic generation	18:00	Daria Markina (<i>ITMO University</i>) Optical sensing of organic solvents vapor with lead halide perovskite nanowire lasers on one-dimensional polymer nanograting
18:15	Denis Tihon (<i>Catholic University of Louvain</i>) Efficient characterization of resonant dielectric particles	18:10	Valeriy Kondratev (<i>Alferov University</i>) Gallium phosphide nanowires for biological ammonia concentrations detection
		18:20	Alexey Kuznetsov (<i>Saint-Petersburg Academic University, RAS</i>) Influence of plasmon effects on the electromagnetic waves localization in GaP nanowires
		18:30	Ilia Chepkasov (<i>Skolkovo Institute of Science and Technology</i>) Computational Design of Spin-mediated Sensors Based on V3S4 Monolayer
18:30	Wine Reception		

Time	Wednesday, December the 8th	
Paris (GMT+1)		
8:45	Welcome Coffee	
	Bibliothèque	
9:00 - 9:35	Plenary Talk: Che Ting Chan (<i>Hong Kong University of Science and Technology</i>) Photonic Crystals as Non-Local Meta-surfaces and Topological Crystals Chair - Alexander Shalin	
9:35	COFFEE BREAK	
	Bibliothèque	Salle du Conseil
9:55	All-Dielectric Nanophotonics (hybrid III) Chairs: Nahid Talebi and Alexander Shalin	9:55 THz Optoelectronics and Photonics (hybrid I) Chair: Andrey Gorodetsky
9:55	Arseniy Kuznetsov (<i>Institute of Material Research and Engineering (IMRE), Agency for Science, Technology and Research (A*STAR)</i>) - Tunable dielectric nanoantennas and metasurfaces	9:55 Ihar Babushkin (<i>Leibniz University, Hannover</i>) Billiard-like resonances in metallic nanostructures and their use for efficient ultrafast nonlinear optics
10:10	Isabelle Staude (<i>Friedrich-Schiller-University Jena</i>) Hybridizing Photonic Metasurfaces with Two-Dimensional Materials	10:10 Masayoshi Tonouchi (<i>Osaka University</i>) How to use terahertz emission spectroscopy and imaging in real onsite semiconductor R&D scenes
10:25	Jun Wei Wu (<i>Southeast University, China</i>) Fast syntheses of phase-only metasurfaces for full-state and high-efficiency control of electromagnetic fields	10:25 Vladimir Antonov (<i>Royal Holloway University of London/Skoltech</i>) The absolute power meter of microwave radiation.
10:40	Helmut Ritsch (<i>Innsbruck University</i>) Minimalistic efficient quantum devices build of dipole coupled nano arrays of quantum emitters	10:40 Juliette Mangeney (<i>Ecole Normale Supérieure</i>) Large HgTe nanocrystals for THz technology
10:55	Thomas Pertsch (<i>Friedrich Schiller University Jena</i>) Quantum state generation in dielectric metasurfaces	10:55 Rostislav Arkhipov (<i>Saint Petersburg State University</i>) Advances in Optics of Subcycle and Unipolar Pulses
11:10	Frank Setzpfandt (<i>Friedrich-Schiller-Universith Jena</i>) Parametric frequency conversion in lithium niobate metasurfaces	
11:25	COFFEE BREAK	11:10 COFFEE BREAK
	Bibliothèque	Salle du Conseil

11:45	Polaritonics & Plasmonics (hybrid) <i>Chair: Pavlos Lagoudakis</i>	11:30	Smart Nanomaterials (hybrid) <i>Chair: Alexander Gumennik</i>
11:45	Masoud Taleb (<i>Christian-Albrechts-University in Kiel</i>) Exciton polaritons interacting with plasmons in WSe ₂ -Au lattices investigated using Cathodoluminescence Spectroscopy	11:30	Jonas Johansson (<i>Lund University</i>) The composition of metal particle catalyzed ternary III-V nanowires
12:00	Sebastian Klemmt (<i>University of Würzburg</i>) Topological photonics and topological lasers with coupled vertical resonators	11:45	George Kyzas (<i>International Hellenic University, Kavala, Greece</i>) Graphene-based materials for wastewater treatment
12:15	David Lidzey (<i>University of Sheffield</i>) Polariton lasing in organic semiconductor microcavities	12:00	Yon Ju-Nam (<i>Swansea University</i>) Green Chemistry – Manufacturing Novel Nanomaterials in Water
12:30	Stella Harrison (<i>University of Southampton</i>) A Quantum Annealing Approach to Optical Analogue Computing	12:15	Zubair Ahmad (<i>Qatar University Young Scientists Center</i>) Investigation of optimum sintering conditions for cold compact nanostructured bismuth telluride thermoelectric material
12:40	Mohamed Beshr (<i>Technological University Dublin</i>) Towards plasmon mapping of SERS-active nanostructures obtained through thin metal film dewetting using scanning probe energy loss spectroscopy	12:30	Thomas Webster (<i>Interstellar Therapeutics, Hebei Institute of Technology, and VIT</i>) 4D Printing Green Nanomedicine: 20 Years of Learning from Nature to Fight COVID-19, Reverse Infection, and Grow Tissues
12:50	Laura Polimeno (<i>CNR Nanotec</i>) 2D perovskites for spin-orbit photonics and topological polaritons	12:45	Alessia Sambugaro (<i>University of Verona</i>) Porous silicon microparticles as a multimodal drug delivery system
13:00	Simone de Liberato (<i>University of Southampton</i>) Ultrastrong light-matter coupling: engineering electronic wavefunctions with single photons	13:00	Lucie Válková (<i>Palacky University</i>) Synergistic antibacterial effect of silver nanoparticles combined with antibiotics: Mechanism study using fluorescence microscopy
Bibliothèque			
13:15	Plenary Talk: Pavlos Lagoudakis (<i>Skoltech, Southampton</i>) Liquid Light Computing: from logic to analogue simulation <i>Chair: Kate Berseneva</i>		
13:50	STEMM Global Scientific Society (Membership benefits, Funding opportunities, Academia & Business Partnership)		
	Anna Baldycheva, Ekaterina Berseneva, Igor Meglinski, Yang Hui-He, Pavlos Lagoudakis		
14:15	LUNCH		

	Bibliothèque
15:15 - 15:40	Keynote Talk: Ventsislav Valev (<i>University of Bath</i>) Harmonic Scattering Optical Activity: a new nonlinear optical probe for chiral materials Chair: Anna Baldycheva
15:45	Early Career (hybrid) Chair: Ventsislav Valev
15:45	Sang Soon Oh (<i>Cardiff University</i>) Non-Abelian Topological Charges of Nodal Links in Dielectric Photonic Crystals
16:00	Kristina Rusimova (<i>University of Bath</i>) Thermal and nonthermal mechanisms of hot electron chemistry
16:15	Emilija Petronijevic (<i>Sapienza University of Rome</i>) Low-cost, asymmetric metasurfaces for chirality at the nanoscale
16:30	Anastasiia Vasylychenkova (<i>University College London</i>) Analytical models for quality of transmission applied for ultrawideband system analysis and design
16:45	COFFEE BREAK & POSTER SESSION
17:20	THz Optoelectronics and Photonics (hybrid II) Chair: Andrey Gorodetsky
17:20	Keynote Talk: Mona Jarrahi (<i>University of California Los Angeles</i>) Semiconductor Surface States: Nanoscale Wavelength Converters
17:45	Oleg Mitrofanov (<i>University College London</i>) Perfectly Absorbing Optical Metasurfaces for Terahertz Applications
18:00	Takis Kontos (<i>PSL Research University</i>) Vacuum-field-induced THz transport gap in a carbon nanotube quantum dot
18:15	Vedran Jelic (<i>Michigan State University</i>) Terahertz scanning tunneling microscopy of atomically precise nanostructures
18:30	Anastasios D. Koulouklidis (<i>Institute of Electronic Structure and Laser, Foundation for Research and Technology, Greece</i>) THz self-modulated graphene perfect absorber
18:45	Networking

Thursday, December the 9th

Time		
Paris (GMT+1)		
8:45	Welcome Coffee	
	Bibliothèque	
9:00 - 9:35	Plenary Talk: David Andrews (University of East Anglia) Engineering the short-range transfer of electronic energy <i>Chair: Pavlos Lagoudakis</i>	
9:35	BREAK	
	Bibliothèque	Salle 2
9:45	Smart, Functional Fibers and Textiles (hybrid I) <i>Chair: Alexander Gumennik</i>	9:55 The spectroscopy techniques in Art Session 1: Spectroscopy and tomography for art <i>Chair: Victor Etgens</i>
9:45	Keynote Talk: Lei Wei (<i>Nanyang Technological University</i>) Advanced Functional Semiconductor Fibers and Fabrics: New Frontier of Flexible Electronics	9:55 Keynote Talk: Kaori Fukunaga (<i>Tokyo Denki University</i>) An overview of THz time-domain imaging in heritage science
10:10	Yakup Aykut (<i>Bursa Uludag University, Department of Textile Engineering</i>) Chemi-thermal and morphologic investigation of ti (iv) isopropoxide/pvp precursor nanofibers for facile TiO2 nanofiber preparation	10:20 David Giovannacci (<i>French Research Laboratory on Historical Buildings</i>) Non-Destructive analysis to investigate the stone alterations at a UNESCO world heritage site: the Lalibela's churches, Ethiopia
10:20	Chong Hou (<i>Huazhong University of Science and Technology</i>)	10:35 Haida Liang (<i>ISAAC Lab, Nottingham Trent University</i>) From remote sensing and machine learning to the history of the Silk Road
10:35	John Canning (<i>University of New South Wales</i>) Additive Manufacture of Single and Multi-Core Optical Fibres	10:50 Sergey Stafeev (<i>ITMO University</i>) and Alkis Lembessis (<i>Hellenic Institute of Holography, Greece</i>) Display Holography: a novel technological multi-tool for modern Museums
10:55	Sylvain Danto (<i>University of Bordeaux</i>) Stack-and-draw Revisited For The Engineering Of Multi-material Ribbon Fibers	11:00 Jessica Aubert-le-Saux (<i>C2RMF, SATIE</i>) Surface displacement measurements of artworks: new data processing for speckle pattern interferometry

		11:10	Vadim Veiko, Daria Lutoshina (<i>ITMO University</i>) Laser painting as a new direction of modern art
		11:20	Alexander Khmaladze (<i>SUNY, University at Albany, USA</i>) Raman Spectroscopy Can Assess the Age of Animal Bones and Ivories
		11:30	Sergey Sirro and Anastasia Zhuravleva (<i>The State Russian Museum</i>) Monumental worship cross of Uspenskaya Chapel, Kem Cathedral, Russian Federation.
11:10	COFFEE BREAK	11:45	Questions to Session 1
Bibliothèque		Amphithéâtre Chaudron	
11:20	Nanophotonics (hybrid) <i>Chair: Oleksandr Kyriienko</i>	12:00	The spectroscopy techniques in Art Round table: <i>Chair: Michael Menu</i>
11:20	Keynote Talk: Ortwin Hess (<i>Trinity College Dublin, The University of Dublin</i>) Spatio-Temporal Near-Field and Quantum Dynamics of Large-Area Semiconductor Lasers and Nano-Confined Quantum Emitters	12:00 - 13:00	Round table: Russian Mobile Laboratory for Heritage Science David Giovannacci, Nikolay Nikonorov, Igor Gurov, Sergey Sirro, Olga Kravtsenyuk, Jean-Paul Guillet, Denis Prokuratov, Tatiana Pavlova, Olga Smolyanskaya, Vincent Detalle, Michel Menu
11:45	Keynote Talk: Pavel Ginzburg (<i>Tel Aviv University</i>)		
12:10	Ji-Young Kim (<i>University of Michigan</i>) Chiral Superstructure Printing by Circularly Polarized Light		
12:25	Dmitry Chigrin (<i>DWI Leibniz Institute for Iterative Materials and RWTH Aachen University</i>) Active metasurfaces based on phase change materials and hydrogels		
12:55	LUNCH		
Bibliothèque		Amphithéâtre Chaudron	
14:15	Keynote Talk: Alexey Feofanov (<i>Lomonosov Moscow State University</i>) Nucleosome complexes with proteins and drugs through the prism of spFRET microscopy <i>Chair: Anna Baldycheva</i>	14:15	Keynote Talk: Marc Voisot (<i>independent researcher</i>) Review of the recipes and processes of gilding brass practiced in France, 16th - 19th centuries. <i>Chairs: Olga Smolyanskaya, Michael Menu</i>

14:40	All-Dielectric Nanophotonics (hybrid IV) <i>Chairs: Hadi Shamkhi and Alexander Shalin</i>	14:50	The spectroscopy techniques in Art Session 2: Numerical methods <i>Chairs: Vincent Detalle</i>
14:40	Andrey Evlyukhin (<i>Leibniz Universität Hannover</i>) Anapole response of a trimer-based dielectric metasurface	14:50	Keynote Talk: Sorin Hermon (<i>Cyprus Institute</i>) The Digital Twin as a semantic-aware data-integration framework in Heritage Science
14:55	Willie Padilla (<i>Duke University</i>) Deep Inverse Design of All-Dielectric NanoPhotonics	15:15	Ruven Pillay (<i>C2RMF</i>) Processing and Visualization of High Resolution Quantitative Multi-Modal Spectral Data
15:10	Louise Bradley, Julia Lawless (<i>Trinity College Dublin</i>) Size Dependence of Rabi Splitting Using Gold Nano-Bipyramids on Monolayer MoS ₂	15:30	David Citrin (<i>Georgia Tech - CNRS</i>) Terahertz Imaging Applied to Art and Archaeological Objects
15:25	Alexander Shalin and Adria Canos Valero (<i>ITMO University</i>) Novel Hybrid anapole state and non-Huygens transparent metasurfaces	15:45	Nikolay Petrov / Ekaterina Rabosh (<i>ITMO University</i>) Photogrammetric digitizing of a three-dimensional image of the object surface reconstructed from a display hologram
15:40	Mikael Käll (<i>Chalmers University of Technology</i>) Light driven microscopic vehicles powered and steered by embedded optical metasurfaces	15:55	Mikhail Basmanov (<i>ITMO University</i>) Development of Cultural Heritage Science Database
15:55	Adria Canos Valero (<i>ITMO University</i>) Superscattering emerging from the physics of bound states in the continuum	16:05	Olesya Malaya (<i>Heritage Science lab, ITMO University</i>) Application of image processing techniques to the THz visualization of painting's inner layer
16:05	Hadi Shamkhi (<i>ITMO University</i>) Pronounced superscattering channels mediated by the Friedrich-Wintgen mechanism of interfering modes		
16:15	COFFEE BREAK & POSTER SESSION		
	Bibliothèque		
16:35 - 17:10	Plenary Talk: Yoel Fink (MIT) Computing Fabrics <i>Chair: Alexander Gumennik</i>		
	Bibliothèque		Amphithéâtre Chaudron
17:15	Smart, Functional Fibers and Textiles (hybrid II) <i>Chair: Alexander Gumennik</i>	17:15	The spectroscopy techniques in Art Session 3: Concrete cases in art <i>Chairs: Vincent Detalle</i>

17:15	Keynote Talk: Ursula Gibson (<i>Dartmouth</i>) Laser processing of semiconductor core fibers – device prospects	17:15	Keynote Talk: Giuseppina Padeletti (<i>CNR-ISMN</i>) Beauty & Secrets of Lustred Majolica at Renaissance
17:40	Michael Fokine (<i>KTH Royal Institute of Technology, Sweden</i>) Glass additive manufacturing for specialty fiber fabrication	17:40	Nikolay Nikonorov (<i>Heritage Science lab, ITMO University</i>) A reproduction of fabrication process of Kievan Rus' ceramic tiles
17:55	Alexander Gumennik (<i>Indiana University</i>) Molten-phase processing of multimaterial monofilaments: a route to functional fiber-embedded systems	17:50	Tatiana Pavlova (<i>The State Russian Museum</i>) The main activities of Oil Painting Conservation Department of the State Russian Museum
18:10	Camila Faccini de Lima (<i>Indiana University</i>) Building blocks for fiber-embedded quantum circuitry	18:00	Alexandra Smolyanskaya (<i>Heritage Science lab, ITMO University</i>) Double Optics: the Role of Technological Research in Art History. German Painting
18:20	Peter Mosley (<i>University of Bath</i>) Smart photonic crystal fibre design for quantum technology applications	18:10	Denis Prokuratov (<i>Heritage Science lab, ITMO University</i>) Non-destructive techniques for the inlay's detection
		18:20	Ivan Andreev (<i>Heritage Science lab, ITMO University</i>) The application of optical and spectroscopy methods for the study of paintings by Russian avant-garde artists of the 1910s
19:00	GALA DINNER		

<i>Time</i>	Friday, December the 10th		
<i>Paris (GMT+1)</i>			
8:45	Welcome Coffee		
	Bibliothèque		Online
9:00	Smart, Functional Fibers and Textiles (hybrid III) <i>Chair: Alexander Gumennik</i>	9:00	All-Dielectric Nanophotonics (online II) <i>Chairs: Adria Canos Valero and Alexander Shalin</i>
9:00	Keynote Talk: Guangming Tao (<i>Huazhong University of Science and Technology</i>)	9:00	Daria Smirnova (<i>Australian National University</i>) Designing photonic topological states via staggered bianisotropy
9:25	Xiaoting Jia (<i>Virginia Tech</i>) Multifunctional Fibers for Wearable and Implantable Applications	9:15	Hong-Gyu Park (<i>Korea University</i>) Low-threshold topological nanolasers
9:40	Fabien Sorin (<i>EPFL</i>) Soft Electronic Fibers for Sensing and Energy Harvesting	9:30	Mikhail Rybin (<i>ITMO University, Ioffe Institute</i>) Reversible optical switching of GeSbTe spherical nanoparticles
9:55	Joshua Kaufman (<i>CREOL, The College of Optics & Photonics, University of Central Florida</i>) Towards Scalable Manufacturing of Color-Changing E-Textiles	9:45	Fernando Moreno (<i>University of Cantabria</i>) Reconfigurable devices with phase change materials: GaS, Ga ₂ S ₃ and MoO _x
10:10	Louis van der Elst (<i>Indiana University</i>) Functional Fibers and Textiles for Biomedical Engineering	10:00	Boris Lukiyanchuk (<i>Lomonosov Moscow State University</i>)
10:20	COFFEE BREAK		
	Bibliothèque		
10:45	Quantum Optics and Quantum Metrology (hybrid) <i>Chair: Kate Berseneva</i>		
10:45	Oleksandr Kyriienko (<i>University of Exeter</i>) Nonlinear quantum optics with trion-polariton in 2D materials		
11:00	Ferruccio Renzoni (<i>University College London</i>) Quantum Sensors for Electromagnetic Induction Imaging: from Atomic Vapours to Bose-Einstein Condensates		
11:15	Alexey Fedorov (<i>Russian Quantum Center</i>)		
11:30	Mads Anders Jørgensen (<i>Technical University of Denmark</i>)		

	Quantifying the breakdown of the Rotating-Wave Approximation in Superradiance
11:40	Vladimir Krishtop (<i>JSC Infotecs</i>) Raman cooling in submicron attenuators, doped with optically active impurities
11:50	Vladimir Popov (<i>JSC Infotecs</i>) Laser anti-Stokes Raman cooling of diamond single photon source
12:00	Ridha Eddhib (<i>University of Carthage, Tunisia</i>) Probing single photon emission in monolayer-transition metal dichalcogenides
12:10	LUNCH
	Bibliothèque
13:20 - 13:55	Plenary Talk: Silvia Giordani (<i>Dublin City University</i>) Carbon Nano Onion - a nanoscale material with bio at heart <i>Chair: Anna Baldycheva</i>
13:55 - 14:55	COFFEE BREAK & NETWORKING
	Bibliothèque
15:20	Energy Harvesting and Photovoltaics (hybrid I) <i>Chair: Yiwen Wang</i>
15:20	Keynote Talk: Akhlesh Lakhtakia (<i>The Pennsylvania State University</i>) Strategies for Efficiency Enhancement of Thin-Film Solar Cells
15:45	Joe Briscoe (<i>Queen Mary University of London</i>) Aerosol Treatment for Efficient and Stable Perovskite Solar Cells
16:00	Zhe Li, Xueyan Hou (<i>Queen Mary University of London</i>) Relationship between molecular properties and degradation mechanisms of organic solar cells based on bis-adducts of phenyl-C61 butyric acid methyl ester
16:15	Yiwen Wang (<i>Queen Mary University of London</i>) Stability of Non Fullerene Organic Solar Cells: from Built-in Potential and Interfacial Passivation Perspectives
16:30	COFFEE BREAK
	Bibliothèque
16:50	Energy Harvesting and Photovoltaics (hybrid II + panel discussion) <i>Chair: Anna Baldycheva</i>

16:50	Yong Zhang (<i>The University of North Carolina at Charlotte</i>) Comparative studies of optoelectrical properties of prominent PV materials: Halide perovskite, CdTe, and GaAs
17:05	Qinrong He (<i>Queen Mary University of London</i>) P-N junction-based ZnO textile nanogenerator for wearable energy-harvesting
17:15	Amrita Dey (<i>Ludwig Maximilians University, Munich</i>) Transfer of Direct to Indirect Bound Excitons by Electron Intervalley Scattering in Cs ₂ AgBiBr ₆ Double Perovskite Nanocrystals
17:25	Panel Discussion on Energy Harvesting and Photovoltaics
	Bibliothèque
18:05	Plenary Talk: Federico Capasso (<i>Harvard University</i>) Meta optics: from metalenses to structured light and dark
18:15	AWARD & CLOSING CEREMONY