

# AGENDA

## AIPT – INTERNATIONAL DAY OF LIGHT 2021

**Location:** Online  
**Date:** 21<sup>st</sup> May 2021  
**Time:** 9:00 -18:00  
**Chairs:** Dr. Daniel Hill, Dr. Vladimir Gordienko, Mahmood Abu-Romoh

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|----------------------|---|
| <b>09:00 – 09:15</b> | <b>Prof. Sergei Turitsyn</b><br>Introduction  |
| <b>09:15 – 09:30</b> | <b>Igor Kudelin</b><br>OSA/SPIE Student Chapters  |
| <b>09:30 – 09:45</b> | <b>Dr. Sergey Sergeyev</b><br>Multi-scale fibre-based optical frequency combs: science, technology and applications (“MEFISTA”)       |
| <b>09:45 – 10:00</b> | <b>Dr. Auro Perego</b><br>Tuneable Optical Frequency Combs in Nonlinear Resonators  |
| <b>10:00 – 10:15</b> | <b>Prof. Nick Doran</b><br>FOPA Group and why we love parametric amplifiers   |
| <b>10:15 – 10:30</b> | <b>Dr. Yiming Li</b><br>Mode division multiplexing: A ultra-fast data transmission scheme in free space optical communication systems |
| <b>10:30 – 10:45</b> | <b>Dr. Karina Litvinova</b><br>Intraoperative laser-based modalities for myocardial assessment  |
| <b>10:45 – 11:00</b> | <b>Dr. Sergei Sokolovsky</b><br>Consuming light   |
| <b>11:00 – 11:30</b> | <b>Coffee Break</b>   |

<b>11:30 – 11:45</b>	<b>Student Talk: Mariia Borovkova</b> Stokes polarimetry for label-free detection of Alzheimer's disease in mouse brain tissue
<b>11:45 – 12:00</b>	<b>Student Talk: Ivan Lopushenko</b> Human visual perception of polarized light
<b>12:00 – 12:15</b>	<b>Dr. Sonia Boscolo</b> Recent machine-learning applications in ultrafast nonlinear fibre photonics
<b>12:15 – 12:30</b>	<b>Dr. Morteza Kamalian Kopae</b> Neural Network-Based Equalisation in the Nonlinear Fourier Domain
<b>12:30 – 12:45</b>	<b>Student Talk: Pedro J. Freire</b> Neural Network Application in Optical Channel Equalization
<b>12:45 – 13:00</b>	<b>Student Talk: Mohammad Hosseini</b> Cost-efficient Networking
<b>13:00 – 14:00</b>	<b>Lunch</b>
<b>14:00 – 14:15</b>	<b>Dr. Lucas Souza</b> Multi-functional photo-thermal biomaterials for bone cancer therapy
<b>14:15 – 14:30</b>	<b>Dr. Daniel Hill</b> H2020 MONPLAS photonic technologies for micro and nano-plastic identification and enumeration
<b>14:30 – 14:45</b>	<b>Student Talk: Namita Sahoo</b> Optical Fibre Grating Sensors – Fabrication, Measurement and Applications
<b>14:45 – 15:00</b>	<b>Student Talk: Nasir G. Bello</b> Quantum dot Antenna for THz generation
<b>15:00 – 15:10</b>	<b>Student Talk: Gabriella Gardosi</b> Optofluidics in a capillary fibre
<b>15:10 – 15:20</b>	<b>Dr. Manuel Crespo-Ballesteros</b> Nonlinear effects in SNAP resonators
<b>15:20 – 15:30</b>	<b>Prof. Misha Sumetsky</b> What's up with SNAP

<b>15:30 – 15:45</b>	<b>Announcement of the winners of photo competition</b>
<b>16:00 – 16:30</b>	<b>Break</b>
<b>16:30 onwards</b>	<b>Quiz</b>

