International PhD Academy
Global Challenges Initiatives

Light: Its Nature and Its Use

Venice International University
May 3-7, 2021

Faculty
• Laurent Servant, University of Bordeaux, Scientific coordinator
• Lionel Canioni, University of Bordeaux, Scientific coordinator
• Brahim Lounis, University of Bordeaux, Scientific coordinator
• Martin Hachet, University of Bordeaux/INRIA
• Edouard Gerbaud, University of Bordeaux/CHU
• Neil Maiden, CITY University of London
• Stefan Maier, Ludwig Maximilians Universität München
• François Légaré, Institut National de la Recherche Scientifique (INRS)
• Jean-Claude Kieffer, Institut National de la Recherche Scientifique (INRS)
• Paolo Prospisito, Tor Vergata University of Rome
• Maarten Rooffaers, KU Leuven
• Alessandro Farini, National Research Council of Italy (CNR)
• Fabio Peron, IUAV University of Venice
• Alessandra Fornetti, VIU - TEN Program on Sustainability
• Ilda Mannino, VIU - TEN Program on Sustainability

Agenda

Sunday, May 2, 2021
Day 1 – Arrival

Monday, May 3, 2021
Day 2 – History of Light | Light imaging | Light for Health

9:00-9:15 Welcome Coffee and Registration

9:15-9:30 Opening and Introduction to the PhD Academy (VIU & Scientific Coordinators)
Tuesday, May 4, 2021
Day 3 – Extreme Light

9:15-10:45  3.1 - Low energy light
            Brahim Lounis - University of Bordeaux

10:45-11:00  Break

11:00-11:45  3.2 - Mid-Infrared femtosecond laser technologies and their applications in ultrafast science
            François Légaré – INRS

11:45-12:30  3.3 - Applications of High peak power lasers: from early detection of breast cancer to global Food Security
            Jean Claude Kieffer – INRS

12:30-13:45  Lunch Break

13:45-17:30  Transversal Skills Session
            Design Thinking and Creativity
            Neil Maiden – CITY University of London and Ca’ Foscari University of Venice
**Wednesday, May 5, 2021**

**Day 4 – Technology of Light | Light related Technologies**

9:15-10:45 \quad 4.1 - Nanophotonics  
Stefan Maier – LMU

10:45-11:00 \quad Break

11:00-12:30 \quad 4.2 - Photonics devices  
Lionel Canioni – University of Bordeaux

12:30-13:45 \quad Lunch Break

13:45-15:00 \quad Poster Presentation I  
Students

15:00-15:15 \quad Break

15:15-17:30 \quad Transversal Skills Session  
How to Develop a Project Proposal for Funding (Daniele Archibugi, CNR - tbc)

*Evening* \quad Social Dinner (tbc)

**Thursday, May 6, 2021**

**Day 5 – Light and (Modern/Future) Society**

**Part 1: Perception of Light**

9:15-10:15 \quad 5.1.1 - Art and Light  
Alessandro Farini – CNR

10:15-11:15 \quad 5.1.2 - The Role of Light in the Augmented Reality  
Martin Hachet – University of Bordeaux

11:15-11:30 \quad Break

11:30-12:30 \quad Poster Presentation II  
Students

12:30-13:45 \quad Lunch Break

**Part 2: Light in Urban Planning**

13:45-15:15 \quad 5.2 - Light and Architecture for a Better Living  
Fabio Peron – Iuav University of Venice

15:15-15:30 \quad Break
Friday, May 7, 2021
Day 6 – Light and (Modern/Future) Society | Wrap-up

Part 3: Security and Environmental Protection | Sustainable Development

9:15-10:45  5.3.1 - Harvesting solar light for Sustainable Development (i.e. Photocatalysis and Photovoltaics as part of the Sustainable Development)
Maarten Roeffers – KU Leuven

10:45-11:00  Break

11:00-12:30  5.3.2 - Optical sensors based on nanomaterials for Environmental Protection
Paolo Prosposito – Tor Vergata University of Rome

12:30-13:45  Lunch Break

13:45-16:00  Final Discussions and Wrap-up
Everyone

Saturday, May 8, 2021
Day 7 – Departure