Venice International University
International PhD Academy

Intense Lasers for Societal Applications

Venice International University
May 13-17, 2024

Faculty
1. Andrea Macchi, National Research Council of Italy (CNR)/National Institute of Optics (INO), Italy, Scientific Coordinator
2. Emmanuel d'Humieres, University of Bordeaux, France, Scientific Coordinator
3. Joerg Schreiber, Ludwig-Maximilian University (LMU), Germany, Scientific Coordinator
4. Inka Manek-Hönninger, University of Bordeaux (UB), France
5. Emanuela Reale, CNR/ Institute for Research on Sustainable Economic Growth (IRCRES), Italy
6. Elisabetta Baldanzi, CNR/INO, Italy
7. Caterina Vozzi, CNR/ Institute for Photonics and Nanotechnologies (IFN), Italy
8. Katia Parodi, Ludwig-Maximilian University, Germany
9. Joao Santos, University of Bordeaux, France
10. Pier Luigi Mazzeo, CNR/ Institute of Applied Sciences and Intelligent Systems "Eduardo Caianiello" (ISASI), Italy

Guest speakers
1. Patrizio Antici, Institut National de la Recherche Scientifique (INRS), Canada
2. Anne Hildenbrand-Dhollande, ISL French-German Research Institute of Saint-Louis, France
Day 1 | Monday, May 13, 2024

Morning

11:00 – 11:15  Registration and Welcome Remarks (VIU & PhD Academy Coordinators)

11.15 – 12:45  Ice break activity: student's self-introduction with flash "single slide" presentation (students)

11:30 – 12:30  Ice break activity: student's self-introduction with flash "single slide" presentation (students)

12.30 – 14.00  Lunch

Afternoon

14.00-15.00  Intense Laser-Matter Interaction (Andrea Macchi, CNR/INO)

15:00 – 16:00  High Power Lasers (Inka Manek-Hönninger, UB)

16.00 – 16.30  Break

16.30 – 18:00  Transversal Skills Session - How to Communicate Science (Elisabetta Baldanzi, CNR/INO)

Day 2 | Tuesday May 14, 2024

Morning

9:00 – 10:00  Principles of Laser-Plasma Acceleration (Andrea Macchi, CNR/INO)

10:00 – 11:00  Laser-plasma acceleration: experiments (Joerg Schreiber, LMU)

11:00-11:30  Coffee Break

11:30 – 12:30  Laser Processing of Materials (Inka Manek-Hönninger, UB)

12:30 - 13:30  New diagnostics using novel particle sources (Patrizio Antici, INRS)

13.30 – 14.45  Lunch

Afternoon

14:45 - 16:15  Transversal Skills Session - Publish and Evaluate Research Results (Emanuela Reale, CNR/IRCRES)

16:15-16:30  Break

16:30 – 18:00  Student's short talks Session 1 (students)

Day 3 | Wednesday May 15, 2023

Morning

9:00 – 11:00  Image Guided Ion Beam Therapy & FLASH effect (Katia Parodi, LMU)

11:00 – 11:30  Coffee Break
11:30 – 12:30  Laser-plasma acceleration: applications (Joerg Schreiber, LMU)
12:30 – 13:30  Transversal Skills section: Project Proposal & Management (Patrizio Antici, INRS)
13:30 – 14:45  Lunch

Afternoon
14:45 – 16:15  Student's short talks Session 2 (students)
19:30  Social dinner in Venice

Day 4 | Thursday May 16, 2024

Morning
9:00-11:00  Attosecond Science (Caterina Vozzi, CNR/IFN)
11:00 – 11:30  Coffee Break
11:30 – 13:30  Laboratory Astrophysics (Emmanuel d'Humieres, UB)
13:30 – 14:45  Lunch

Afternoon
14:45 – 16:45  Transversal Skills Session – AI for Science (Pier Luigi Mazzeo, CNR/ISASI)
16:45 – 17:00  Break
17:00 - 18:30  Transversal Skills Session – Patent Application & Commercialization, Networking & Negotiation Skills (Patrizio Antici, INRS)

Day 5 | Friday May 17, 2024

Morning
09:00 – 11:00  Lasers for Defense Applications (Anne Hildenbrand-Dhollande, ISL)
11:00 – 11:30  Coffee Break
11:30 – 13:30  Lasers for Inertial Confinement Fusion (Joao Santos, UB)
13:30 – 14:45  Lunch

Afternoon
14:45 – 15:45  Final Discussion and Wrap-Up (VIU, PhD Academy Coordinators & students)
15:45 – 16:15  Departure