

## OWTNM 2023 – Detailed schedule

**Venue : Marseille St-Charles Campus (3 place Victor Hugo, 13331 Marseille Cedex 3)  
Amphitheatre « Sciences naturelles »**

Begin	End	Duration	Thursday, May 4
08:20	08:50	00:30	<i>Welcoming (badge distribution)</i>
08:50	09:00	00:10	<i>Opening of the workshop : Anne-Laure Fehrembach, Gilles Renversez (Institut Fresnel, France)</i>
			<b>1 – Theory and modelling 1 (9h-10h50)    Chaired by Gilles Renversez (Institut Fresnel)</b>
09:00	09:35	00:35	Nahid TALEBI (invited): Electron-light Interactions Simulated with Multiscale Maxwell-Schrödinger Framework
09:35	09:53	00:18	<del>Guillaume DEMESY : Open source finite element models for photonics with ONELAB/Gmsh/GetDP</del> Brian STOUT : Leaky modes for waveguide response functions
09:53	10:11	00:18	Paula NUNO-RUANO : Modelling and engineering of the optomechanical coupling in subwavelength-structured silicon waveguides
10:11	10:29	00:18	Tong WU : MAN: A freeware to compute and analyze modes of resonators
10:29	10:47	00:18	Mandana JALALI : Coated Microtoroid versus Coated Microsphere for Biosensing Applications
10:50	11:20	00:30	<i>Coffee break</i>
			<b>2 – Machine learning (11h20-12h35)    Chaired by Benjamin Vial (Imperial College)</b>
11:20	11:38	00:18	<del>Sendy PHANG</del> Gleb ANUFRIEV: Numerical Demonstration of a Photonic Reservoir Computing Based on a Stimulated Brillouin Scattering System
11:38	11:56	00:18	Gleb ANUFRIEV : Time-Delayed Photonic Reservoir Computing for Chemical Sensing
11:56	12:14	00:18	Andrei V. ERMOLAEV : Identifying extreme localization and rogue waves in fibre optics modulation instability using data-driven dominant balance
12:14	12:32	00:18	Mehdi MABED : Machine Learning analysis of Continuous Wave fiber Modulation Instability
12:35	14:00	01:25	<i>Lunch break</i>
			<b>3 – Theory and modelling 2 (14h-15h30)    Chaired by Brian Stout (Institut Fresnel)</b>
14:00	14:35	00:35	Ana VUKOVIC (invited): Recent advances in Modelling Photonic Crystal Surface Emitting Lasers (PCSEs) Using Unstructured Transmission Line (UTLM) Modelling Method
14:35	14:53	00:18	Herve TORTEL : FETI method applied to the scattering studies of long resonant structures
14:53	15:11	00:18	Anurag SHARMA : Full Vectorial 3-D Non-Paraxial Beam Propagation Method
15:11	15:29	00:18	<del>Chun-Fang LI : No circular birefringence exists in a chiral medium</del>
15:30	16:00	00:30	<i>Coffee break</i>
			<b>4 – Integrated optics 1 (16h-17h50)    Chaired by Manfred Hammer (Paderborn Univ.)</b>
16:00	16:35	00:35	José-Manuel LUQUE-GONZALES (invited, on behalf of Pavel CHEBEN) : Anisotropy engineered metamaterials for polarization and mode management in integrated photonics
16:35	16:53	00:18	Nikos FAYARD : The comb waveguide: a new tool for Waveguide QED

16:53	17:11	00:18	Maria PASZKIEWICZ : Approximation methods for the fast calculation of transmission of photonic wire bonds
17:11	17:29	00:18	Anurag SHARMA : A Propagation Method for Higher Order Modes in Fiber Structures
17:29	17:47	00:18	Ajay KUMAR : Beam Propagation Analysis for Bragg Fibers
19:30	23:30	04:00	<i>Conference dinner : restaurant La Nautique (pavillon flottant, Quai de rive neuve, 13007 MARSEILLE)</i>

Begin	End	Duration	Friday, May 5
08:20	08:40	00:20	<i>Welcoming (badge distribution)</i>
			<b>5 – Integrated optics 2 (8h40-10h30)    Chaired by <i>Sendy-Phang Anne-Laure Fehrembach (Institut Fresnel)</i></b>
08:40	09:15	00:35	<a href="#">Delphine MARRIS-MORINI (invited): SiGe photonics circuits for the mid-IR wavelength range</a>
09:15	09:33	00:18	Jonathan PELTIER : DC Kerr effect for high speed modulation
09:33	09:51	00:18	Enakshi K. SHARMA : Design Strategy for Compact Mode-Division-Multiplexer for Multi-Channel Optical Interconnects
09:51	10:09	00:18	Manfred HAMMER : Lossless operation of high-contrast integrated optical waveguide gratings
10:09	10:27	00:18	Gilles RENVERSEZ : Modelling of a fully integrated graphene-based compact plasmon coupler
10:30	11:00	00:30	<i>Coffee break</i>
			<b>Posters (11h-12h30) – Espace Pouillon</b>
12:30	14:00	01:30	<i>Lunch break</i>
			<b>6 – Inverse design (14h-15h30)    Chaired by <i>Guillaume Demésy (Institut Fresnel)</i></b>
14:00	14:35	00:35	<a href="#">Benjamin VIAL (invited): Optimizing photonic devices: open-source implementation of auto-differentiable numerical methods</a>
14:35	14:53	00:18	Enzo ISNARD : Advancing wavefront shaping with resonant metasurface
14:53	15:11	00:18	Søren Engelberth HANSEN : Inverse design of compact and broadband nanophotonic beamsplitters
15:11	15:29	00:18	Antoine MOREAU : Physically understandable photonic structures generated by optimization
15:30	16:00	00:30	<i>Coffee break</i>
			<b>7 – Theory and modelling 3 (16h-17h30)    Chaired by <i>Anne-Laure Fehrembach (Institut Fresnel)</i></b>
16:00	16:18	00:18	Nicolas LEBBE : Homogenization and optimization of plasmonic metasurfaces
16:18	16:36	00:18	Emmanuel ROUSSEAU : On the Generalized Snell-Descartes laws for metasurfaces
16:36	16:54	00:18	Ya Yan LU : A General Theory on the Robustness of Bound States in the Continuum
16:54	17:12	00:18	<del>Brian STOUT : Leaky modes for waveguide response functions</del> <a href="#">Guillaume DEMESY : Open source finite element models for photonics with ONELAB/Gmsh/GetDP</a>
17:12	17:30	00:18	Isam BEN SOLTANE : A description of MOSEM (Multiple-Order Singularity Expansion Method) and its interest for studying light scattering
17:30	17:40	00:10	<i>Closing of the workshop</i>