

**Program AMOLF International Nanophotonics Summer school**  
 Amsterdam Science Park Congress Center, Science Park 123, Amsterdam

**Monday, June 17, 2019**

8.50	Opening by Said Rodriguez, Bruno Ehrler and Albert Polman (co-chairs)
<b>Prof. Femius Koenderink (AMOLF, Amsterdam)</b>	
9.00	Tutorial: Resonant nanophotonics
10.00	Break
10.15	Highlight: Plasmonic confinement at high Q - can plasmonic-photonic resonators reach strong coupling? Chair: Elaine Li
10.45	Break
<b>Prof. Jean-Jacques Greffet (Institut d'Optique, Paris)</b>	
11.00	Tutorial: Nanoscale radiative heat transfer
12.00	Break
12.15	Highlight: Light emission by nonequilibrium bodies: local Kirchhoff's Law Chair: Allard Mosk
12.45	Lunch
<b>Prof. Nathalie de Leon (Princeton University)</b>	
13.45	Tutorial: Optical emitters for quantum technology
14.45	Break
15.00	Highlight: Environmentally insensitive solid-state spin defect in diamond Chair: Erik Garnett
15.30	Break
<b>Participant talks</b> Chair: Bruno Ehrler	
15.45	Robin Lingstädt (Univ. Stuttgart) - Wedge polaritons interacting with engineered defects in the hyperbolic material $\text{Bi}_2\text{Se}_3$
16.00	Marianne Aellen (ETH Zurich) - Plasmonic and photonic lasing in silver cavities
16.15	Arpan Dutta (University of Jyväskylä) - Controlling chemistry using strong light matter coupling
16.30	Welcome reception at AMOLF
18.00	End

**Tuesday, June 18, 2019**

<b>Prof. Allard Mosk (Utrecht University)</b>	
9.00	Tutorial: Optical wavefront shaping
10.00	Break
10.15	Highlight: Programming single-photon wavefronts for quantum authentication Chair: Jenny Nelson
10.45	Break
<b>Prof. Jenny Nelson (Imperial College, London)</b>	
11.00	Tutorial: Fundamental limits in nanophotovoltaics
12.00	Break
12.15	Highlight: Non-radiative energy losses in bulk-heterojunction organic photovoltaics Chair: Jean Jacques Greffet
12.45	Lunch
<b>Participant talks</b> Chair: Said Rodriguez	
13.45	Zlata Cherpakova (University of Bonn) - Optical ratchet based on plasmonic waveguide arrays
14.00	Ruben Hamans (DIFFER Eindhoven) - Super-resolution mapping of plasmon-enhanced processes
14.15	Andreas Svela (Imperial College London) - Near-field sensing with symmetry-breaking enhancement in microresonators
14.30	Group photo
14.45	Poster session 1 and labtours at AMOLF with drinks
17.30	End

**Wednesday, June 19, 2019**

<b>Prof. Ewold Verhagen (AMOLF, Amsterdam)</b>	
9.00	Tutorial: Nano-optomechanics
10.00	Break
10.15	Highlight: Nonreciprocal light and sound through radiation pressure interactions Chair: Nathalie de Leon
10.45	Break
<b>Prof. Elaine Li (Univ. Austin - Texas)</b>	
11.00	Tutorial: Optical properties of atomically thin semiconductors
12.00	Break
12.15	Highlight: New opportunities of engineering emitters in a van der Waals heterostructure Chair: Mikael Rechtsman
<b>Excursion</b>	
12.45	Bus departure, lunch on the bus
14.30	Boat trip, games and barbeque at Loosdrechtse plassen
21.00	End, return to Amsterdam

**Thursday, June 20, 2019**

<b>Prof. Stephan Goetzinger (Max Planck Institute for the Science of Light, Erlangen)</b>	
9.00	Tutorial: Quantum optics in nanosystems
10.00	Break
10.15	Highlight: Single molecule high-fidelity photon gun for producing intensity-squeezed light Chair: Esther Alarcon Llado
10.45	break
<b>Prof. Mark Wilson (Univ. Toronto)</b>	
11.00	Tutorial: Energy transport phenomena in nanostructured materials
12.00	Break
12.15	Highlight: Solid-state infrared-to-visible upconversion sensitized by colloidal nanocrystals Chair: Stephan Goetzinger
12.45	Lunch
<b>Prof. Javier Aizpurua (Materials Physics Center, San Sebastian)</b>	
13.45	Tutorial: Strong coupling and quantum molecular plasmonics
14.45	Break
15.00	Highlight: Coupling emitters and plasmonic cavities beyond the point-dipole approximation Chair: Isabelle Staude
15.30	Poster session 2 at AMOLF with drinks
17.30	End

**Friday, June 21, 2019**

<b>Prof. Isabelle Staude (Abbe Center of Photonics, Jena)</b>	
9.00	Tutorial: Metasurface and Mie-resonant nanophotonics
10.00	Break
10.15	Highlight: Nonlinear, tunable and light-emitting dielectric metasurfaces Chair: Javier Aizpurua
10.45	Break
<b>Prof. Mikael Rechtsman (Pennsylvania State University)</b>	
11.00	Tutorial: Introduction to topological photonics
12.00	Break
12.15	Highlight: Realization of optical Weyl points and exceptional rings Chair: Mark Wilson
12.45	Closing remarks, end of school