

International School on Plasmonics and Nano-Optics, Turin 4-7 July 2022 – Final Program

	Monday 4th July	Tuesday 5th July	Wednesday 6th July	Thursday 7th July
9.00-10.45	Registration/ Introduction	Annamaria Gerardino	Lorenzo Marrucci	<i>Welcome Coffee</i>
10.45-11.30	<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>	PLASMONICA 2022 Workshop Opening
11.30-13.15	Jaime Gómez Rivas	Alfred J. Meixner	Bert Hecht	
13.15-14.15	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	
14.15-16.00	Stefanie Gräfe	Pietro Gucciardi	Giulio Cerullo	
16.00-16.45	<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>	
16.45-17.25	Selected Talks <i>G. Conte</i> <i>M. Trevisani</i>	Selected Talks <i>M. Manoccio</i> <i>M. David</i>	Selected Talks <i>L. Guarneri</i> <i>O. Pashina</i> <i>G. Ferrando</i>	
17.25-18.40	E. Perotti (COMSOL)	M. Unger (Bruker) M. Hrabovsky (Tescan)	17.45 Aperitif & Poster session	
				Social Dinner

LIST OF LECTURERS

- Giulio Cerullo** «Ultrafast processes in plasmonic nanostructures»
- Annamaria Gerardino** «How to realize photonic and plasmonic devices? Nanofabrication process design and technology for a challenging task»
- Jaime Gómez Rivas** «Collective Plasmonic Resonances»
- Stefanie Gräfe** «Plasmon Catalysis»
- Pietro Gucciardi** « Advanced nanostructures and substrates for thermophoretic concentration and SERS detection »
- Bert Hecht** «How to build plasmonic nanomotors to drive microdrones»
- Lorenzo Marrucci** «Spin-orbit optical phenomena»
- Alfred J. Meixner** «Plasmonics and Nano-Optics for Chemical Sensing»

LIST OF TUTORIALS

- Elisabetta Perotti** «Plasmonics and Modeling in COMSOL Multiphysics»
- Milos Hrabovsky** «Fabrication of Plasmonic nanostructures via Nanoprototyping applications using FIBSEM systems»
- Miriam Unger** «2D Material Characterization Using Nanoscale IR Spectroscopy and Imaging with a Versatile Broadband IR Laser Source»

LIST OF SELECTED SPEAKERS

Gloria Conte	«Bound states in the continuum in dielectric metasurfaces»
Mauro David	«Surface-enhancement of ultra-broadband mid-IR plasmonic waveguides for liquid spectroscopy applications»
Giulio Ferrando	«Large-scale metasurfaces for plasmon enhanced photobleaching of dye molecules»
Ludovica Guarneri	« Excitonic scattering in atomically-thin optical elements»
Mariachiara Manoccio	«3D Helix-based Metamaterial Arrays for Femtomolar Biodetection»
Olesia Pashina	«Thermo-optical conversion of SHG radiation from semiconductor nanodimers»
Mirko Trevisani	«Coherent photon sources based on 2D Al periodic nanostructures»

List of posters

Wednesday 6th July Poster session		
1	S. Balestrieri	Plasmonic Nanodevice to induce strong EM field gradient
2	L. Bonatti	In-silico design of graphene plasmonic hot-spots
3	G. Di Maio	Gold nanocubes two dimensional monolayers: preparation and characterization of versatile plasmonic substrate
4	G. Ferrando	Microfabricated SiN membrane applied as a free-standing waveguide for refractive index sensing
5	B. Hinkov	A mid-infrared lab-on-a-chip for real-time reaction monitoring of liquids
6	A. Intze	Actively tunable hybrid-2D angle-sensing photodetectors
7	Y. Luan	Near-Unity Third-Harmonic Circular Dichroism in Silicon Chiral Metasurfaces
8	R. Magrin Maffei	Electrical Modulation of the Optical Response of an Al-doped ZnO Thin Film
9	A. Mohan	Magnetically co-doped Indium Tin Oxide nanoparticles (ITO-NPs) for magnetoplasmonic refractometric sensing
10	L. Ramò	Local optical properties of CVD-grown ML-WS ₂ flakes on an ultra-dense plasmonic array of Au NPs
11	S. Sotgiu	Raman scattering with near infrared excitation selectively resonant with the indirect bandgap of bulk MoSe ₂
12	M.E. Temperini	Infrared nanospectroscopy study of light-sensitive proteins with a plasmonic probe
13	D. Urban	Light-triggered reversible deformations of a polymeric substrate in arbitrary directions
14	R. Büchner	Plasmon-Induced Circular Dichroism of Gold Nanoparticles of Different Shapes

15	M. Dieperink	Determining the optical properties of Au nanorods using the metal nanoparticle boundary element method
16	S. Ehtesabi	Plasmon-driven Reactivity and Selectivity on Metal Nanoparticles Assessed by Quantum Chemical Simulations
17	Q. Nguyen	Bottom-up and top-down synthesis of Au@AZO core@shell nanomaterials
18	D. Ryabov	Thermo-optical bistability in single semiconductor super-cavity
19	F. Scalerandi	Charge transfer in hybrid metal-semiconductor systems at a single NP level and correlation to morphology
20	A. Verneuil	Nonlinear optical sensing in arrays of plasmonic nanoparticles
21	S. Thakur	Shaping ZnO nanoparticles: Effect of nanoparticle morphology on caffeine degradation

Selected Talks: 15 min + 3min QT

Posters: Preferred (maximum) sizes: 120cm x 150cm or 100cmx120cm

School Location

The Politecnico di Torino main campus is a large complex of buildings in Corso Duca degli Abruzzi. It was opened in November 1958, after the former Industrial Museum was completely destroyed during World War II. The construction of the new Cittadella Politecnica in Corso Castelfidardo began in 1997 when Politecnico di Torino acquired the former Officine Grandi Riparazioni. The Cittadella is a single integrated complex of buildings of high architectural and urban value whose spaces are used by companies and management services, University and individual citizens

How to reach Politecnico di Torino

The easiest way to reach the conference location is by entering the Cittadella Politecnica of the Polytechnic University of Turin from the parking entrance located in Corso Castelfidardo 42bis, underneath the south bridge. It is ten minutes from the Porta Susa train station.

In alternative, you can take the Metro line from either Porta Susa or Porta Nuova train stations and get off at the "Vinzaglio" stop. Inside the Politecnico you will find signs carrying the Plasmonica 2022 logo pointing to the conference rooms (Classrooms P). Support staff will eventually assist you to reach the conference site.

