	Monday Sep. 3 <sup>rd</sup> Session A Session B		Tuesday Se Session A	Session B	Wednesda Session A	Session B	Thursday S Session A	Session B	Friday 7 <sup>th</sup> ESF
			NEAR-FIELD MICROSCOPY	CHIRAL PLASMONICS	THZ AND INFRARED NEAR- FIELD MICROSCOPY	HYBRID PHOTONIC STRUCTURES	ACOUSTICS AND FORCES IN NANOOPTICS	EMISSION	ESF 1
8:30-9:00	OFFICIAL OPENING		Chair: D. Courjon	Chair: A. Dereux	Chair: C. Lienau	Chair: J. Krenn	Chair: R. Bachelot	Chair: A. Meixner	Chair: S. Maier. Maier: Concepts for plasmonic biosensing based on hybrid plasmonic modes
9:00-9:30	OPENING TALK: Lukas Novotny: 20 years of NFO		Hartschuh: New directions in tip-enhanced near-field optical microscopy.	nanostructures:	Han: Quantitative Spectroscopic Terahertz Near- Field Microscopes.	Benson: Fundamental Photonic Hybrid Systems based on Defect Centers in Diamond.	Mlayah: Acousto-Plasmonics sensing	Koenderink: Near-field measurement and manipulation of antenna- enhanced spontaneous emission	Fritzsche: Biosensing at the single particle level
		NANOPHOTONICS Chair: O. Martin		0.5		h			
9:30-9:45	Wickramasinghe: Raman Probe Force Microscopy - a New Method to Detect the Raman Effect Deckert: TERS Mapping of	Di Fabrizio: Nanostructures and their use in nano optics Halas: Nanoplasmonics	spectroscopy	G <sup>a</sup> Etxarri: Superchiral near fields: 'Twisted' hot spots in optical nanoantennas Klimov: Engineering	Kim: Strong coupling between nano-slot antenna and nano- object below skin-depth limit	Vasa: Real-time observation of ultrafast Rabi oscillations between excitons and plasmons in metal-molecular hybrid nanostructures Celebrano: Assembly and	Arbouet: Intense optical near-fields and mechanical vibrations: femtosecond spectroscopy of large crystalline gold nanoparticles	Chen: Metallo-dielectric antennas for ultrastrong enhancement of spontaneous emission	Krenn: Tuning plasmon modes for
9:45-10:00			Kim: Stacking structures of multilayer graphenes revealed by infrared near- field microscopy	of radiation from chiral molecules with chiral nano-meta- particles	Mitrofanov: Terahertz probe for spectroscopy of sub- wavelength objects	manipulation of nanophotonic elements in a fluid: towards reconfigurable photonic structures on a chip Vitry: Near-field patterns and	Yamazaki: Single molecule DNA analysis using a large electric field gradient at Si nanopore opening	Dostalek: Plasmon-enhanced fluorescence for biosensor applications	
10:00-10:15	an (A10C15)8 DNA Single Strand	applications: hot electrons, bubbles and whiskey Curto: Magnetic and	Decker: Mapping of single insulin fibrils with TERS	Narushima: Direct Imaging of Nanoscale Circular Dichroism	Jones: Thermal Near-field Optical Spectroscopy Albella: Quantitative evaluation	geometric resonances in heterogeneous nanoparticle arrays	Renaut: Optical tweezing with nanobeam coupled cavities Nieto Vesperinas: Optical forces on	Kajihara: Nano-thermometry with a sensitive infrared near- field microscope	Quidant: Towards an integrated plasmonic platform
10:15-10:30	reproducible TERS as a tool for everyone	electric multipolar interactions with nanoantennas	mapping from active region of InGaN emitters	Hentschel: Three- dimensional chiral plasmonic oligomers	of the electromagnetic mechanism of surface- enhanced light scattering at single hot spots	Leonetti: Mode-locking in disordered lasers	small particles from partially coherent light. The near field of statistically homogeneous fluctuating sources	Bharadwaj: Electrical excitation of surface plasmons	
10:30-11:00	Coffee	Break	Coffee-Br	eak AMPLIFICATION	Coffee	-Break	Coffee-Bi	reak	Coffee-Break
	SCANNING PROBE MICROSCOPY Chair: J. Gerton	OPTICAL ANTENNAS Chair: H. Xu	TERS AND SERS Chair: V. Deckert	AND QUANTUM EFFECTS Chair: J-J. Greffet	NONLINEAR NANOOPTICS Chair: W. Dickson	IMAGING Chair: D. Kim			ESF 2 Chair: N. Van Hulst Leosson: New
	single molecular	Yang: Driving Resonances In Plasmonic Nanoantennas By Electrons and Photons	Suh: Nano-gap Enhanced Raman Scattering (NERS) controlled by DNA	Stockman: Spasing and Amplification in Plasmonic Nanosystems Fedyanin: Surface	Bouhelier: X(2) processes in electrically contacted optical gap antennas: second harmonic generation and optical rectification	Dorfmüller: Real-Space Imaging of Optical Nanoantennas by apertureless SNOM	Discussion panel Chaired by Naomi Halas and Kobus Kuipers		fabrication approaches in low- loss plasmonics and controlled self- assembly of metal nanostructures for biosensing
11.30-11.45	near-rieid optical spectroscopy in a tunneling junction	Kern: Atomic-scale confinement of optical fields	Augié: Combined SPR and SERS spectroscopy on a flat metal surface Ando: Surface-enhanced	plasmon polariton amplification upon electrical injection: towards active plasmonic interconnects	Huttunen: Second-harmonic generation imaging of individual metal nano-objects with cylindrical vector beams	Le Feber: Towards a complete vectorial mapping of electromagnetic near-fields			Hoeppener: Single Sphere and Self-similar Colloidal Nanoparticle Antennas for Membrane Protein Imaging
11.45-12.00	monocrystalline silicon solar	Martin: Optical transport in plasmonic break junctions	Raman nano-imaging of	Nordlander: Quantum Plasmonics and Plexcitonics	Barbosa: Design of a nanorod metamaterial for enhanced fast nonlinearities	Bachelot: Near-Field Characterization Based on Nanoscale Photo- Polymerization			
							FABRICATION. Chair: P. Gucciardi	FUNDAMENTAL NEAR- FIELD OPTICS. Chair: O. Keller	
12.00-12.15	near-field optical microscopy – instrumentation and application to plasmonics	Hohenau: Revisiting polycrystalline gold nanoparticles: optical near fields and dielectric function	Felidj: Revisiting surface enhanced Raman scattering on realistic lithographic gold stripes	Esteban: Quantum effects induced by tunneling in large plasmonic systems	Bertelot: Silencing of second harmonic in coupled antennas	Rewitz: Spectral-interference microscopy for characterization of functional plasmonic elements	Fischer: Near - field photo - chemical fabrication of chemical nanostructures	Carminati: Time-domain radiation by subwavelength sources: A new look at near- field optics	<b>Käll:</b> Nanoplasmonic biosensing –
12:15-12:30	a noniterative exact	Zabala: Transport and sensing in the optics of plexcitons at nanoparticle dimer nanocavities		David: Nonlocal effects in plasmonic devices	Biagoni: Unraveling four- photon photoluminescence in gold nanoantennas	Gersen: Imaging individual gold nanoparticles through Interferometric Cross- Polarization Microscopy	Umakoshi: Fabrication of near-field plasmonic tip by photoreduction for strong enhancement in tip- enhanced Raman spectroscopy	Greffet: Validity of macroscopic electrodynamics at the nanoscale for dielectrics	promises and problem
12:30-12.45	of light	Massiot: Sub-wavelength nano-antennas for efficient ultra-thin solar cells	Blum: Amide I Mode Missing in Tip-Enhanced Raman Spectroscopy?	Transformation optics description of nonlocal effects in plasmonic nanostructures	Abb: Interference and nonlinear response through coupling of higher order modes in asymmetric dimer antennas		Bragas: Nanofabrication and in situ optical characterization of plasmonic probe tips	the double-slit experiment?	Closing talk: <b>Van Hulst</b>
12.45-13.00							Härtling: IR optical properties of nanoantennas with photochemically narrowed gaps in the 1-nm-regime	Laverdant: Spatial coherence properties of surface plasmon polariton investigated by Young Slits experiment	Official closing
13.00-14:15	Lun	ch	Lunch				Lunct	,	ornelar closing
	IMAGING WITH ELECTRONS Chair: R. Vogelgesang	PLASMONIC WAVEGUIDING Chair: V. Sandoghdar	ULTRAFAST NANOOPTICS Chair: R. Quidant	GRAPHENE PLASMONICS Chair: Z. H. Kim	Excursion to Bilbao		PLASMONICS FOR IMAGING Chair: D. P. Tsai	QUANTUM / ACTIVE NANOOPTICS Chair: P. Nordlander	
14:15-14.45	Induced by Swift Electrons	surface plasmons in textured particles	ontical control at the	Basov: Dirac plasmon in graphene: spectroscopy and imaging			Verma: High-resolution optical imaging through plasmonics and beyond plasmonics	Wrachtrup: Near field imaging with single diamond defects	
14:45-15:00	plasmons and Babinet complementarity	S. Zhang: Tailoring Dielectric Substrate for Metallic Nanowires toward High Performance Plasmonic Wavequiding	Hohenester: Ultrafast hot- electron emission from plasmonic nanoparticles	Nikitin: Plasmons get involved: resonant electromagnetic effects in graphene			Shirdel: Adiabatic nanofocusing on ultrasmooth single-crystalline gold tapers creates a nanometer-sized light source with few-cycle time	Poyli: Theoretical modeling of plasmonic sensing of Hydrogen intake in Palladium nanodisks	
15:00-15:15	enhanced electron spectral microscopy	Klein: Interference of Airy surface plasmons	Brinks: Coherent Ultrafast Plasmonics with Nanoantennas	Thongrattanasiri: Colossal Plasmon Field Enhancement in Graphene Dimers			Schuck: Demonstrating Near-Ideal Near-Field Spectroscopic Imaging Probes	Yamaguhi: Active plasmon filter	
15:15-15:30	probed in a counter-	Volkov: Long-range dielectric-loaded plasmonic waveguides for integrated	Silies: Observing the localization of light in space and time by ultrafast second-harmonic microscopy	Beams: Graphene luminescence from tunneling electrons			Berweger: Light at the tip of a needle: Nanometer-femtosecond control of an optical wavepacket Mivelle: Near-Field Bowtie Nano-	Renger: Active plasmonics based on phase change materials	
15:30-15:45 15:45-16:00	inaging specifoscopy.	Wei: Controlling Surface Plasmons in Silver Nanowire Waveguides	Petek: Coherent imaging of surface plasmon dynamics by time-resolved photoelectron emission microscopy	Koppens: Graphene plasmonics			Aperture probe as nano-source for single molecule fluorescence excitation Lapin: Sub 20-nanometer single molecule imaging using mass fabricated pyramidal microstructures	Pardo: Light focusing at nanoscale level by magnetoelectric interference Tantussi: Remote excitation o single carbon nanotubes by propagating surface plasmons launched by a scanning source	
16:00-16.30	GRAPHENE PLASMONICS	Break OPTICAL AND INFRARED ANTENNAS AND WAVEGUIDES Chair: M. Raschke	Coffee-Br INFRARED SPECTROSCOPY Chair: A. Bragas	eak QUANTUM EFFECTS. Chair: L. Novotny			Coffee-Bi ELECTRICAL CURRENTS IN NANOOPTICS Chair: U. Fischer	source reak SINGLE EMITTERS Chair: S. Maier	
16.30-17.00	plasmonics: An atomically	De Wilde: NSOM applications to plasmonics at infrared wavelengths	Pucci: Surface enhanced infrared spectroscopy	<b>Baumberg:</b> Capturing the Quantum Regime in Tunneling Plasmonics			Berndt: Plasmons in single-atom and single-molecule junctions	Lukin: Nanophotonics meets quantum optics	
17.00-17:15	Fang: A Graphene-Antenna Sandwich Photodetector	Alonso: Experimental Verification of the Shift between Near-Field and Far-Field Peak Intensities in Plasmonic Nanoantennas	Govyadinov: Quantitative determination of dielectric properties of nano- structures by s-SNOM in two and three dimensions	Bochterle: Measurement of the quantum mechanic behavior of the nanoantenna- enhanced near field			Thunich: Sub-diffraction quantum interference control of electrical currents in nanodevices	Greffet: Nanoantennas for single photon emission	
17.15-17:30	of gate-tuneable graphene	Sánchez Gil: Plasmonic Fano resonances become single-particle Huang: Plasmonic Mode	Raschke: Ultrafast infrared near-field molecular nano- spectroscopy	Sonnefraud: Quantum statistics of surface plasmon polaritons in metallic stripe waveguides			Kern: Electrically connected resonant optical antennas	Geiselmann: 3D optical trapping and manipulation of a single NV center for LDOS mapping Lindfors: Coupling plasmonic	
17:30-17:45	Manjavacas: Plasmon blockade in nanostructured graphene	Converter for Optical Impedance Matching and Nanoscale Light-matter Interaction	Bensmann: Near-field infrared microscopy with a broadband light source	Wu: Quantum Description of Charge Transfer Plasmon			Badicker: Light-induced electronic transport changes through metallic nanostructures	structures to self-assembled quantum dots for engineering the optical properties of single photon emitters	2
17:45-18:00		Pohl: Stacked optical antenna	region	Drezet: Wave-particle duality for single surface plasmons propagating on a polycrystalline gold film			Piglosiewicz: Strong field acceleration and steering of utrafast electron pulses from a sharp metallic nanoprobe	Cueff: Sub-lifetime Electrical Modulation of Lanthanide Emission	
18.00-21.00	Poster Se	ession 1	18.00 Group 18.30 Poster S	ession 2		I	Poster Ses	sion 3	1
20:30-23:00					Conference dinner				]