

Sunday Sept. 3 rd		Monday Sept. 4 th		Tuesday Sept. 5 th		Wednesday Sept. 6 th		Thursday Sept. 7 th		Friday Sept. 8 th	
		Integrated Photonics		Frequency Comb and Optical power build up approaches		Direct Absorption Spectroscopy		Spectroscopy for Atmospheric Applications		Sensing for Bio, Food, and Petrochemical Applications	
	09:00 - 09:15	Opening: V. Spagnolo, M. Grande and W. Whelan Curtin		09:00 - 09:30	J. Faist - Integrated optical frequency combs for mid-infrared spectroscopy	09:00 - 09:30	S. Cristescu - Optical absorption spectroscopy applied for trace gas sensing	09:00 - 09:30	G. Wysocki- Drone-assisted spectroscopic detection of trace-gas plumes – new technologies and emerging	09:00 - 09:20	L. Dong - Calibration-free Mid-Infrared Exhaled Breath Sensor based on BF-QEPAS for Non-invasive
	09:15 - 09:45	M. Belkin - Mid-infrared photonics integration on InP		09:30 - 09:50	M. Marangoni - High-speed dual-comb spectroscopy in the 8-12 μ m region	09:30 - 09:50	P. De Natale - Molecular detection with a sensitivity of parts per quadrillion	09:30 - 09:50	M. Ghysels Dubois - Around the "atmospheric world" under a balloon : a long-duration observation of the equatorial tropopause with the Pico-SDIA tunable diode laser spectrometers	09:20 - 09:40	C. Cordero - Challenges and Opportunities from Food Volatilomics: Sensing the Quality
	09:45 - 10:05	I. Cristiani - Photonic integrated circuits for laser frequency stabilisation		09:50 - 10:10	K. Cossell - Atmospheric measurements using open-path mid-infrared dual-comb spectroscopy	09:50 - 10:10	J. Toivonen - Fourier transform photoacoustic spectroscopy with broadband supercontinuum lasers	09:50 - 10:10	W. Chen - Cavity enhanced optical sensing of the atmosphere	09:40 - 9:55	G. Aoust- Innovative QCL building blocks for spectroscopy applications
	10:05 - 10:25	F. Francis - Fiber-coupled CO2 sensor using photonic crystal waveguides		10:10 - 10:25	M. Kotlyar - Photothermal spectroscopy of water vapour using a silicon nitride ring resonator transducer	10:10 - 10:25	R. Krebbers - Mid-infrared supercontinuum-based Fourier transform spectroscopy for multispecies open-path measurements	10:10 - 10:25	B. Tuzson - Recent advances in VOC analysis by mid-IR laser spectroscopy	9:55 - 10:10	G. Menduni - Quartz Enhanced Photoacoustic Spectroscopy and Light Induced Thermoelastic Spectroscopy for natural gas composition analysis
	10:25 - 10:40	J.H.M. Castro - Control of Fano Spectral Profile based on a Silicon Nitride Photonic Crystal-Micro Ring Resonator structure		10:25 - 10:40	S. Sam - Bow-Tie Cavity for I-QEPAS for Isotope Analysis: Design and Optimization	10:25 - 10:40	M. Olivieri - H2 detection based on wavelength modulation and multipass absorption spectroscopy	10:25 - 10:40	D. Theiner - Flexible molecular gas sensing platform in the terahertz domain	10:10 - 10:25	H. Moser - ATEX compliant, FPGA based three-channel quantum cascade laser sensor for sulfur species detection in petrochemical process streams
	10:40 - 11:00	Coffee Break		10:40 - 11:00	Coffee Break	10:40 - 11:00	Coffee Break	10:40 - 11:00	Coffee Break	10:40 - 11:00	Coffee Break
		Infrared Sources and Detectors		Industrial Session		Photothermal Spectroscopy		Quartz-Enhanced Photoacoustic Spectroscopy		Spectroscopic Applications	
	11:00 - 11:20	P. Chevalier - The quantum cascade laser pumped molecular laser: a widely tunable source from 100 GHz up to more than 3 THz		11:00 - 11:20	G. Ramer- Mid-IR nanoscale imaging for next generation polymer recycling	11:00 - 11:30	P. Burgholzer - Fundamental limits to spatial resolution in photothermal imaging	11:00 - 11:20	M. Wolff - Photoacoustics analysis of methane isotopologues	11:00 - 11:20	A. Castrillo - Comb-assisted frequency-stabilized cavity ring-down spectroscopy; application to ultra-sensitive detection of water vapour and beyond
	11:20 - 11:40	Q. Wang - Broadband Room-Temperature Mid-Infrared Detection with Nanoparticles		11:20 - 11:35	R. Aidam - Neogy, QCL-based continuous glucose monitoring device	11:30 - 11:50	M. Franko - Recent Progress and Applications of Thermal Lens Spectrometry in Environmental and Bio-medical Sensing	11:20 - 11:35	P. Patimisco - Multi-QCL Quartz-Enhanced Photoacoustic Sensor for Environmental Monitoring	11:20 - 11:35	I. Gazizov - Improved Heterodyne Spectroradiometer: A Leap Towards Precise XCO2 Measurements
	11:40 - 11:55	D. Pinto - Long wavelength distributed feedback tapered quantum cascade lasers		11:35 - 11:50	THORLABS - N. Reusch - Gas Spectroscopy at Thorlabs – From Prisms to QEPAS	11:50 - 12:05	K. Krzempek - Photothermal gas detection using a miniaturized fiber Fabry-Perot cavity	11:35 - 11:50	K. Kinjalk - Highly Selective Toluene Detection using Quartz Enhanced Photoacoustic Spectroscopy at $\lambda = 13.71 \mu$ m	11:35 - 11:50	A. Walsh - Evanescent wave quartz enhanced photoacoustic spectroscopy employing a side-polished fibre for methane sensing
	11:55 - 12:10	M. Paparella - Numerical and experimental analyses of optical coupling for GaSb diode lasers grown on Silicon substrate		11:50 - 12:05	MCQ - G. Canuti - All-in-one Gas mixer and pressure controlling system for spectroscopy	12:05 - 12:20	J. Wacławek - Compact Trace Gas Detection by Balanced-Detection ICAPS	11:50 - 12:05	M. Ruizl - QEPAS sensor for Surveying the Atmospheric Carbon Cycle	11:50 - 12:05	G. V. B. Lukaszewicz - Photothermal Lens and Photothermal Mirror Techniques: Effects and Applications for Material Characterization
	12:10 - 12:25	J. Fordyce - Extended wavelength tuning of multi-section interband cascade lasers with slotted waveguides above 3 μ m		12:05 - 12:20	NANOPLUS - R. Weith - Long Wavelength Cascade Laser Technology for Sensing Applications	12:20 - 12:35	A. Vorobev - Graphene Electrodes on Silicon Nitride Devices for Near-Infrared Wavelength Tuning	12:05 - 12:20	E. Kniazeva - Ultra-compact QEPAS sensors for environmental detection of toxic gases and development of novel near-IR DFB laser diodes for photoacoustic spectroscopy	12:05 - 12:20	G. Malvicini - Balanced – Interferometric Cavity Assisted Photothermal Spectroscopy for environmental and food analysis
	12:25 - 12:40	R. De Palo - Surface Modification of Quartz-Tuning Forks for Light-Induced-Thermoelastic Spectroscopy		12:20 - 12:35	ETG - F. Manassero - TDL,ICL,QCL Qepas gas analyser	12:35 - 12:50	Y. Zhang - Controlling Spatial Resolution and Sensitivity in Nanoscale Chemical Imaging by Photothermal-Induced Resonance Spectroscopy	12:20 - 12:35	G. Biagi - Study of ammonia adsorption and desorption phenomena in a QEPAS sensor		
	12:45 - 14:00	Lunch		12:45 - 14:00	Lunch	12:55 - 14:00	Lunch	12:40 - 14:00	Lunch	12:40 - 14:00	Lunch
		Hybrid Sources and Fibers		POSTER SESSION		Photoacoustic Spectroscopy		SOCIAL ACTIVITY VISIT TO MATERA		PARTICIPANTS TRANSPORTATION TO AIRPORTS	
14.30 - 18.00	PARTICIPANTS ARRIVAL FROM AIRPORTS	14:30 - 14:50 U. Willer - Evanescent-field fiber sensors		14.30-16.30		14:30 - 14:50 M. Sigríst - Photoacoustic detection overview, from past to present		15.00-19.00		14.30 - 19.00	
		14:50 - 15:05 P. Jaworsky - Antiresonant Hollow-Core Fiber and Kagome Hollow-Core Fiber assisted Wavelength Modulation Spectroscopy of ethane in the mid-IR				14:50 - 15:10 T. Rueck- From Lab to Application – Digital Twins of Photoacoustic Gas Sensors					
		15:05 - 15:20 G. Ricchiuti - Photothermal Spectroscopy (PTS) of PMMA thin layer using micro-ring resonators (MRRs)				15:10 - 15:30 R. Li Voti - Photoacoustic Characterization of Metal Nanoparticles Super-Aggregates					
		15:20 - 15:35 G. Paikath - Photonic crystal hybrid lasers for intra cavity Quartz Enhanced Photo-Acoustic Spectroscopy (QEPAS) and Photo-Thermal Spectroscopy (PTS)				15:30 - 15:45 S. Borri - A doubly-resonant cantilever-enhanced photoacoustic sensor for trace-gas detection					
		15:35 - 15:50 A. Annunziato - Optical Fiber Couplers Based on Indium Fluoride Optical Fibers				15:45 - 16:00 J. Fekete - Open photoacoustic cell for measurement of water vapor flux					
		19.30-21.00 DINNER		PIZZA DINNER		19.30-21.00 DINNER		SOCIAL DINNER			
18.00-19.30	WELCOME PARTY										
19.30-21.00	DINNER										