ITQW2015
The 13th International Conference on Intersubband Transitions in Quantum Wells
Vienna, Austria

Monday, September 7th

8.00	Registration + Welcome Coffee
9.00	Official Conference Opening
9:15	*Session: MIR QCLs I*
	Invited: Mattias Beck – *Strain-compensated MIR- and THz-QCLs* (99)
	D. Botez – *0.4 W Single-Lobe Surface-Emitting Quantum Cascade Laser via Plasmon-Enhanced Supression of Antisymmetric Modes* (21)
	B. Hinkov – *Microwave-Frequency Modulation of Distributed-Feedback Quantum Cascade Lasers* (61)
	D. Varnell – *Hybrid Mid-IR OCT System for Imaging and Spectroscopy With New High-Power QC Superluminescent Emitters* (58)
10.45	Coffee Break
11.00	*Session: THz QCLs I*
	Invited: Miriam Serena Vitiello – *Photonic engineering of Terahertz quantum cascade lasers, widely tunable in a microcavity-coupled configuration* (50)
	L. Zhao – *Continuous electrical tuning of a terahertz quantum-cascade laser operating at liquid nitrogen temperature* (12)
	M. Krall – *All-electrical thermal characterization of terahertz quantum cascade lasers* (39)
	D. Burghoff – *Coherent breathing of laser modes in terahertz quantum cascade lasers* (56)
12.30	*12.30-14.00* Lunch Break - Buffet
14.00	*Session: Passive Cavities*
	C.G. Derntl – *Circular-shaped terahertz-patch resonators for cavity quantum electrodynamics* (73)
	A. Mottaghizadeh – *THz Microcavities Using High-TC Superconducting Ground* (57)
	J.-M. Manceau – *Electrical injection of intersubband polaritons in dispersive metal-insulator-metal resonators* (42)
15.30	Coffee Break
16.00	*Session: Modeling*
	E. Dupont – *Nonparabolicity slows down transport in short wavelength intersubband devices: case of InAs/AlSb heterostructures* (75)
	D. Winge – *Ignition of a THz Quantum Cascade Laser* (64)
	C. Ndebeka-Bandou – *Free-carrier absorption: a plausible additional source of gain in Quantum Cascade Lasers* (14)
	O. Malik – *Spectral method for computation of time-dependent effects in complex lasers* (67)
	P. Tzenov – *Density matrix analysis of terahertz quantum cascade lasers for frequency comb generation* (49)

Tuesday, September 8th

9.00	**Session: Active Cavities I**
	Invited: L. Xu – *Terahertz quantum cascade metasurface external cavity laser* (48)
	I. Kundu – *Laser dynamics of coupled cavity terahertz quantum cascade lares – from multimode to single mode emission* (23) L. Butschek – *Broadband External Cavity-QCL with MOEMS diffraction grating for spectral-scan rates in the kHz range* (6) F. Wang – *Far-field engineering of metal-metal terahertz quantum cascade lasers with integrated horn antennas* (10)
10.30	Coffee Break
11.00	**Session: Physics**
	Invited: Angela Vasanelli – *Superradiant emission from electronic excitations* (95)
	S. Huppert – *Controlled incandescence of collective electronic states* (54)
	B.A. Burnett – *Polaron effects in terahertz quantum dot cascade lasers* (68)
	A. Belyanin – *Continuous-wave terahertz laser in graphene* (40)
12.30	*12.30-14.00* Lunch Break - Buffet
14.00	**Session: Detectors**
	Invited: Y. Todorov - *Antenna-coupled THz photodetectors: Recent advances and perspectives* (15)
	H. Schneider – *Two-photon quantum well photodetectors for the THz regime* (44)
	P.L. Souza – *Quantum well infrared photodetectors for detection of radiation with energies beyond the band offsets* (41)
	P. Reininger – *InAs/AlAsSb quantum cascade detectors* (83)
15.30	Coffee Break
16.00	**POSTER Session**
	Authors and titles can be found on the separate sheet "Poster Session"
18.00	

Wednesday, September 9th

9.00	**Session: Active Cavities II**
	Invited: A. Bousseksou – *Frequency selection in mid-IR quantum cascade lasers using built-in meta-surfaces of periodic nano-antennas* (35)
	M. Wenclawiak – *Asymmetric metamaterials for resonance tuning* (52)
	A. Valavanis – *A robust waveguide integration, beam shaping and heat-sinking scheme for terahertz quantum cascade lasers* (22)
	D. Revin – *External Ring Cavity Quantum Cascade Laser Operating in Continuous Wave and Resonant Pumping Regimes* (36)
10.30	Coffee Break
11.00	**Session: MIR QCLs II**
	S. Houver – *Optical sideband generation with mid-infrared quantum cascade lasers up to room temperature* (17)
	M. Yamanishi – *Flickr Voltage-Noise in Quantum-Cascade Lasers below and above Thresholds: Experiments and Correlated Dipole- and Resistance-Fluctuation Model* (3)
	B. Schwarz – *Bi-functional quantum cascade laser/detectors: From design to applications* (84)
	L.T. Le – *Octave Spanning Mid-IR Quantum Cascade Laser Based on a Homogeneous Stack Gain Medium* (81)
12.30	*12.30-14.00* Lunch Break
14.00	**Social Program**
	Alternatives can be found at www.itqw2015.at/organization-program/social-program

Thursday, September 10th

9.00	*Session: Applications*
	Invited: H.-W. Huebers – *4.7-THz Quantum Cascade Laser as Local Oscillator on the Stratospheric Observatory for Infrared Astronomy* (63)
	A. Schwaighofer – *EC-QC laser spectroscopy for mid-IR transmissino measurements of proteins in aqueous solution* (79) C.C. Phillips – *QCL's for Cancer detection and Intra-Cell Chemical Imaging with a sub-diffraction mid-IR s-SNOM* (96) J. Westberg – *Wavelength modulated multi-heterodyne spectroscopy with quantum cascade lasers* (32)
10.30	Coffee Break
11.00	*Session: Materials*
	T. Kotani – *Doping dependent blueshift of intersubband absorption in non-polar m-plane AlGaN/GaN multiple quantum wells* (11) O. Malis – *Terahertz intersubband absorption in non-polar m-plane AlGaN/GaN quantum wells* (62) M. Brandstetter – *Alternative Material Systems for High Performance THz Quantum Cascade Lasers* (71) M. Katz - *Back and front illuminated plasmonic enhanced GaN/AIN quantum cascade detector* (53)
12.30	*12.30-14.00* Lunch Break - Buffet
14.00	*Session: THz QCLs II*
	D. Bachmann – *Terahertz amplification in broadband quantum cascade structures* (46) A. Albo – *Temperature degradation mechanism of diagonal versus vertical terahertz quantum cascade lasers* (2) S. Schoenhuber – *Quantum cascade random lasers* (25) M. Franckié - *Interface roughness: Which aspects are important for QCL transport and gain?* (30)
15.30	Coffee Break
16.00	*RUMP Session*
18.15 + 18.30	Transfer to Conference Dinner
19.00	*Conference Dinner - "Das Schreiberhaus"*
	For more details visit www.itqw2015.at/venue-accommodation/conference-dinner