

## *Time Schedule*

### **Sunday, September 14, 2008**

16:00 – 19:00	<i>Registration</i>
19:00 – 20:00	Federico <b>Capasso</b> (tutorial) “ <i>QC lasers: past, present, future</i> ”
20:00	<i>Dinner</i>

## *Time Schedule*

### **Monday, September 15, 2008**

- 08:30 – 09:30 John **Cockburn** (tutorial)  
“QC Basics” (tbc)
- 09:30 – 10:30 Qing **Hu** (tutorial)  
“Resonant phonon-based THz quantum-cascade lasers and real-time T-rays imaging”
- 10:30 – 11:00 *Coffee break*
- 11:00 – 12:00 Karl **Unterrainer** (tutorial)  
“Time domain spectroscopy of quantum cascade lasers”
- 12:00 – 12:20 William **Charles**  
“Growth and Characterization of  
 $\text{Zn}_{1-x}\text{Cd}_x\text{Se}/\text{Zn}_{1-x'}\text{Cd}_{x'}\text{Mg}_{1-x'-y'}\text{Se}$  Quantum Cascade Emitters”
- 12:20 – 12:40 Simeon **Katz**  
“Low-threshold Injectorless Quantum Cascade Lasers”
- 12:40 – 14:00 *Lunch*
- 14:00 – 16:30 Break-out session
- 16:30 – 16:50 Wilfried **Maineult**  
“Directional beam pattern from a double metal Quantum Cascade Laser with a TEM-Horn Antenna”
- 16:50 – 17:10 Aji **Anappara**  
“Femtosecond build-up of ultrastrong light-matter interaction”
- 17:10– 17:30 Michael **Wanke**  
“On-chip Integration of Terahertz Quantum Cascade Lasers into Lithographically Micromachined Waveguides”
- 17:30 – 18:30 Alessandro **Tredicucci** (tutorial)  
“Intersubband polaritonics”
- 18:30 – 20:30 *Dinner*
- 20:30 – 21:00 Wolfgang **Parz** (invited)  
“Exploration of the Complex Refractive Index and its Derivatives in a Mid-Infrared Quantum Cascade Laser by Ultrafast Spectroscopy”
- 21:00 – 21:20 Dimitri **Oustinov**  
“Investigation of the spectral gain narrowing in THz Quantum Cascade Lasers of various active region sizes”
- 21:20 – 21:40 Miriam **Vitiello**  
“Hot electrons in THz quantum cascade lasers”

## *Time Schedule*

**Tuesday, September 16, 2008**

- 08:30 – 09:30 Carlo **Sirtori** (tutorial)  
“Non-linear optics and microcavities”
- 09:30 – 10:00 Franz **Kaerner** (invited)  
“Instabilities and mode-locking in QC lasers”
- 10:00 – 10:30 Christian **Jirauschek** (invited)  
“Carrier transport modeling in quantum cascade lasers”
- 10:30 – 11:00 *Coffee break*
- 11:00 – 11:30 Lukas **Mahler** (invited)  
“Tuning a distributed feedback THz quantum cascade laser with an external microcavity”
- 11:30 – 12:00 Yannick **Chassagneux** (invited)  
“THz photonic-crystal lasers with boundary-conditions control”
- 12:00 - 12:20 Alexander **Benz**  
“Photonic Crystal Mode Quantum-Cascade Lasers”
- 12:20 - 12:40 Hua **Zhang**  
“High Performance Pillar Type Photonic Crystal Quantum Cascade Lasers at THz Frequency”
- 12:40 – 14:00 *Lunch*
- 14:00 – 16:45 Break-out session
- 16:45 – 17:30 **Poster Flash I**
- 17:30 – 19:00 **POSTER I**
- 19:00 – 20:30 *Dinner*
- 20:30 - Break-out session

## *Time Schedule*

**Wednesday, September 17, 2008**

- 08:30 – 09:30 Ted **Masselink** (tutorial)  
“Limits and Opportunities at the Short-wave end of QCLs:  
Taking Advantage of Atrained Materials”
- 09:30 – 10:00 Dan **Wassermann** (invited)  
“Room Temperature Intersublevel Electroluminesence from Self Assembled  
Quantum Dots”
- 10:00 – 10:30 Giacomo **Scalari** (invited)  
“Magnetic confinement on THz quantum cascade structures”
- 10:30 – 11:00 *Coffee break*
- 11:00 – 11:30 Misha **Belkin** (invited)  
“Designing THz QCL sources for operation above cryogenic temperatures”
- 11:30 – 11:50 Michele **Nobile**  
“Nonlinear wave-mixing in twin-waveguide GaAs/AlGaAs  
quantum-cascade lasers”
- 11:50 – 12:10 Richard **Maulini**  
“High power, high wallplug efficiency room temperature continuous wave  
quantum cascade lasers”
- 12:10 – 12:30 Alfredo **Bismuto**  
“Large cavities Quantum Cascade Lasers with InP interstacks”
- 12:30 – 14:00 Lunch
- 14:00 E x c u r s i o n

## *Time Schedule*

**Thursday, September 18, 2008**

08:30 – 09:00	Kale <b>Franz</b> (invited) “Short Injector Regions for Improved Quantum Cascade Laser Performance”
09:00 – 09:30	Andreas <b>Hugi</b> (invited) “Broadband external-cavity quantum cascade laser”
09:30 – 10:00	Manijeh <b>Razeghi</b> (invited) “High performance QC lasers: Latest achievements and future trends”
10:00 – 10:30	Matthew P. <b>Fraser</b> (invited) “Use of QCL-based Trace Gas Sensors to Study Air Quality and Atmospheric Chemistry”
10:30 – 11:00	<i>Coffee break</i>
11:00 – 11:30	Gerard <b>Wysocki</b> (invited) “External Cavity Quantum Cascade Lasers: Recent Advances and Applications”
11:30 – 12:00	Lukas <b>Emmenegger</b> (invited) “High precision isotope ratio analysis of CO <sub>2</sub> and N <sub>2</sub> O using quantum cascade laser absorption spectroscopy”
12:00 – 12:30	Boris <b>Mizaikoff</b> (invited) “Liquid sensing with QC lasers”
12:30 – 14:00	<i>Lunch</i>
14:00 – 16:45	Break out session
16:45 – 17:30	<b>Poster Flash II</b>
17:30 – 19:00	<b>POSTER II</b>
19:00	<i>Dinner</i>

## *Time Schedule*

**Friday, September 19, 2008**

- 08:30 – 09:00 Erwan **Normand** (invited)  
“Application and standardization of QC Lasers in high volume gas sensing solutions”
- 09:00 – 09:30 Timothy **Day** (invited)  
“Commercially Available Broadly Tunable External Cavity Quantum Cascade Lasers”
- 09:30 – 10:00 \*) Tadatake **Edamura** (invited)  
“Quantum Cascade Lasers Developed at HAMAMATSU and Their Applications”
- 10:00 – 10:30 John **Bruno** (invited)  
“Recent Progress on QC Laser Development at Maxion Technologies, Inc”
- 10:30 – 11:00 *Coffee break*
- 11:00 – 11:30 Mark **Zahniser** (invited)  
“Atmospheric Trace Gas Measurements Using QC Laser Spectroscopy”
- 11:30 – 12:00 Stéphane **Blaser** (invited)  
“MOVPE grown single-mode quantum cascade lasers”
- 12:00 12:30 Paolo **De Natale** (invited)  
“Frequency metrology with Quantum Cascade Lasers”
- 12:30 – 14:00 *Lunch*
- 14:00 – 14:20 Laurent **Diehl**  
“Coherent Coupling of Multiple Transverse Modes in a Quantum Cascade Laser”
- 14:20 – 14:40 Roland **Teissier**  
“Quantum Cascade Lasers emitting at 3.3  $\mu\text{m}$ ”
- 14:40 – 15:00 Leonard **Hoffmann**  
“Quantum Cascade Laser with Mach-Zehnder-type Cavity”
- 15:00 – 15:20 Christian **Pflügl**  
“High Power (1.6 W) Continuous-Wave Room Temperature Quantum Cascade Lasers”
- 15:20 – 15:40 Frank **Tittel**  
“Advanced Infrared Semiconductor Laser based Chemical Sensing Technologies”
- 15:40 – 16:00 Tanya **Myers**  
“Trace Gas Detection with Quantum Cascade Lasers for both Point and Stand-off Detection”