September 16, 2022

EPFL Microcity site, Rue de la Maladière 71C, 2002 Neuchâtel, Switzerland | **Room** MC B1 303

8:00	**Registration**
8:45	**Welcome messages** **Raphaël Butté**, EPFL, and **Dmitri Boiko**, CSEM
	Session chaired by **Raphaël Butté**, EPFL
9:00	**S. Chin**, V. Mitev, E. Giraud, R. Maulini, F. Hempel, N. Lang, M. Wiese, H. Zimmermann, D. L. Boiko Demonstration of mid-IR gas sensing with frequency-swept Fabry-Perot cavity quantum cascade laser
9:20	V. Mitev, **N. Torcheboeuf**, M. Krakowski, P. Resneau, A. Larrue, J.-P. Legoec, Y. Robert, E. Vinet, M. Garcia, O. Parillaud, B. Gerard, D.L. Boiko First Demonstration of Two-Photon Excitation Fluorescence Lifetime Measurements with Ultra-Short Pulse-on-Demand Light Emitter Utilizing Multiple Wide Quantum Wells
9:40	M.Meghnagi, P.Afuso-Roxo, B Vinter, F.Duport, F. van Dijk, A.Larrue, C.Theveneau, E.vinet, Y. Robert, J.P. legoec, M.Garcia, O.Parillaud, B.Gerard, **M. Krakowski** Modulated DFB-ridge laser diodes at 894 nm for compact Cesium CPT atomic clocks
10:00	**Coffee break**
	Session chaired by **Dmitri Boïko**, CSEM
10:30	**Keynote** **Jesper Mørk**, Technical University of Denmark (Denmark), Semiconductor nanolasers exploiting extreme dielectric confinement
11:30	**S. H. Ding**, N. Doggett, D. J. Herrera, H. M. Huang, V. Kovanis, L. F. Lester, and F. Grillot Investigation of temperature-insensitive quantum well DFB lasers using optical injection locking technique
11:50	**D. Cui**, J. Chen, H. Huang, S. Ding, D. Costantini, R. Colombelli, A. Bousseskou, and F. Grillot Optically-injected plasmonic semiconductor laser
12:10	**J. Tiana-Alsina**, C. Masoller A review on the characterization of the locking dynamics of a semiconductor laser subject to optical feedback and weak current modulation
12:30	**Lunch**

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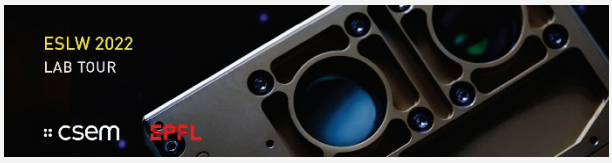
Session chaired by **Jesper Mørk**, Technical University of Denmark

13:30	**Invited** **Richard A. Hogg**, University of Glasgow (UK), Photonic Crystal based lasers
14:00	**S. Bittner** and M. Sciamanna Laser dynamics of a broad-area VCSEL in continuous wave operation
14:20	**D. Owen-Newns**, M. Hejda, A. Hurtado, J. Robertson GHz-Rate Neuromorphic Photonic Spiking Neural Network with a Vertical-Cavity Surface-Emitting Laser
14:40	**M.R. Hofmann**, M. Lindemann, N. Jung, T. Pusch, R. Michalzik, and N. C. Gerhardt Can Spin-VCSELs open the bandwidth bottleneck?
15:00	**Coffee break**

Session chaired by **Richard A. Hogg**, University of Glasgow

15:30	**Invited** **Sven Höfling**, University of Würzburg (Germany), Interband cascade lasers with reduced intersubband absorption
16:00	V. Joshi, S. Bauer, V. Sichkovskyi, F. Schnabel, **J. P. Reithmaier** High gain InP-based 1.3 µm quantum dot laser
16:20	**R.R. Kumar**, L. Nielsen, N. Volet, M.J.R. Heck Intra-Cavity Coherent Combining of DBR Lasers on an InP Generic Foundry Platform
16:40	**S. Chin**, V. Brasch, S. Kundermann, E. Obrzud, M. Gleeson, R. Phelan, B. Eiermann, D. Zadravec, S. Lecomte Self-Injection Locked Ultra-Narrow Linewidth Laser, using an Optical Fiber Ferrule Cavity
17:00	**Organizational Break**
17:15	**CSEM Lab tours – two guided tours**



Scientific Instrumentation

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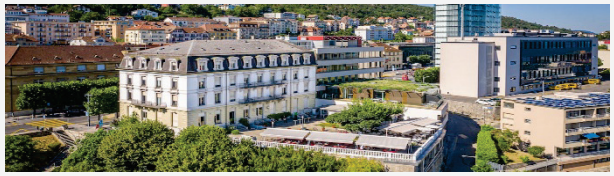
19:00	**Walking to restaurant Alpes & Lac**



19:30	**Aperitif @ Alpes & Lac**
20:00	**Workshop dinner @ Alpes & Lac**

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8:30	**Poster installation**
	Session chaired by **Gaëlle Lucas-Leclin**, Institut d'optique, ParisTech
9:00	**N. Huwyler**, M. Gaulke, J. Heidrich, M. Golling, A. Barh and U. Keller 3-W cw output power from an optically pumped 2-µm InGaSb VECSEL using a hybrid metal-semiconductor Bragg reflector
9:20	**H. Kahle**, P. Rajala, P. Tatar-Mathes, M. Guina Latest developments in broadband (> 26 THz) tuning and anti-resonant gain structure design for membrane external-cavity surface-emitting lasers
9:40	**M. Schuchter**, M. Gaulke, J. Heidrich, N. Huwyler, M. Golling, A. Barh, and U. Keller Towards 1:1 SESAM modelocking of InGaSb VECSEL
10:00	**Coffee break**
	Session chaired by **Johann Peter Reithmaier**, Uni Kassel, Germany
10:30	**Invited** **Sven Bader**, TRUMPF Photonic Components (Germany), Polarization-stabilized VCSEL arrays
11:00	L. Columbo, S. Romero Garcia, A. Tibaldi, P. Debernardi, **M. Gioannini** Relative Intensity Noise in multi-mode VCSELs: a time domain mode expansion approach
11:20	**V. Torrelli**, A. Gullino, M. D'Alessandro, A. Tibaldi, F. Bertazzi, M. Goano, P. Debernardi Simulations of 850 nm tunnel-junction VCSELs with different quantum-corrected models for the active region
11:40	**D. Stark**, F. Kapsalidis, Zh. Wang, M. Bertrand, R. Wang, Bo Meng, E. Gini, M. Beck, J. Faist Small Quantum Cascade Surface Emitting Lasers
12:00	**Lunch & Poster session**
	Poster session chaired by **Mariangela Giovannini**, Politecnico di Torino | Room **Showroom**
	M.-C. Lo, A. Millan-Mejia, E. den Haan, Z. Zhou, L. Augustin Single-Grating DBR Laser with Passive Broadband Mirror on InP Generic Foundry Platform
	A. Memon, A. van Rees, J. Mak, Y. Fan, P.J.M. van der Slot, H.M.J. Bastiaens, K.-J. Boller Generation of low repetition rate frequency combs with a hybrid integrated InP-SiN diode laser
	B. Sassiya, M. Daubenschüz, A. Kaganskiy, and R. Michalzik Voltage Improvement for Datacom VCSELs
	A. Zozulia, Y. Jiao, K. Williams A method of heat sink fabrication in InP membrane lasers by bonding on double-layer BCB
	S. Febvre, C. Levallois, C. Paranthoen, J.-P. Landesman, C. Gardes, P. Issert, F. Laruelle Preliminary study of the characterization of the emission facet of a GaAs based 980nm laser diode
	M. D'Alessandro, A. Gullino, V. Torrelli, A. Tibaldi, F. Bertazzi, M. Goano, P. Debernardi Physics-based modeling of multi-tunnel junction VCSELs

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Session chaired by **Sven Bader**, TRUMPF Photonic Components

13:30	**Invited** **Augustinas Vizbaras**, Brolis Sensor Technology (Lithuania), GaSb/Si widely tunable laser
14:00	**M. Hoppe**, Ch. Aßmann, S. Schmidtmann, M. Honsberg, H. Tatenguem, J. R. Sacher, and S. Gu-Stoppel IC-based ECL for the rapid detection in the MIR Region
14:20	**A. Rosado**, M. R. Fernandez-Ruiz, P. Corredera, J. M. G. Tijero and I. Esquivias High-density electro-optical densification of optical frequency combs generated by optically injected gain-switched semiconductor lasers
14:40	S. F. T. Hansen, E. Z. Ulsig, E. J. Stanton, and **N. Volet** Efficient Frequency Conversion in AlGaAs-on-Insulator Waveguides for the Mid-Infrared
15:00	**Coffee break**

Session chaired by **Wolfgang Elsäßer**, Institut für Angewandte Physik, Technische Universität Darmstadt

15:30	Qin Liu, Sylvie Janicot, Patrick Georges, **Gaëlle Lucas-Leclin** Coherent combination of pulsed tapered amplifiers for water vapor differential absorption lidars
15:50	**A. Stroganov**, A. V. Kovalev, and E. A. Viktorov Subharmonic combs in short-cavity swept lasers
16:10	**J. César Cuello**, A. Zarzuelo, R. C. Guzmán, L. Augustin, and G. Carpintero Thermal Crosstalk Effects on a Monolithically Integrated Optical Heterodyne Source
16:30	**Awards & Workshop Closing** **There will be student awards for best oral talks and posters offered by our sponsors**

Best Student Poster	Best Student Talk	Best Student Talk
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