

Sunday, 17 July	
16:00-19:00	Registration
Monday, 18 July	
8:00-9:30	Registration
9:30 -10:00	Opening Ceremony
10:00-10:45	<p>Sturge Prize Ceremony and Lecture Chair: M. Reid Exceptional Excited State Dynamics in Lead Halide Perovskites for Light Emission and Solar Energy Conversion Applications Haiming Zhu</p>
10:45-11:15	Coffee break
	Session: Doped Insulators Chair: M. Grinberg
11:15-12:00	<p>Laser Cooling of Solids: a journey into the cryogenic regime Mansoor Sheik-Bahae (Tutorial)</p>
12:00-12:15	<p>Excitation of Local Centers in the Long-Wavelength Tail of Electron-Phonon Bands: Feasibility of Laser Cooling and Observation of Spontaneous Fluorescence Oscillations, S.P. Feofilov, A.B. Kulinkin, V.A. Konyushkin, A.N. Nakladov</p>
12:15-12:30	<p>The Eu³⁺ charge transfer energy and position of Eu²⁺ ground level, an exception of the rule, P.J. Dereń, G. Banach, B. Brzostowski, K. Lemański, W. Walerczyk</p>
12:30-12:45	<p>Intervallence Coupling and Persistent Charge-transfer Luminescence in f-element Compounds, Guokui Liu, Shuao Wang, Thomas E. Albrecht-Schmitt</p>
12:45-14:45	Lunch
	Session: Molecular Systems Chair: J. Hala
14:45-15:15	<p>Single-Molecule Study of Conformation-Related Photophysics in Conjugated Molecular Complexes and Organic Dye-Gold Nanoparticle Structures Martin Vacha (Invited)</p>
15:15-15:45	<p>Transient two-dimensional infrared spectroscopy in a vibrational ladder Vincent Kemlin, Adeline Bonvalet, Louis Daniault, Manuel Joffre (Invited)</p>
15:45-16:15	<p>Coherent Energy Transfer in Light Harvesting Complexes: addressing single molecules on fs time scale Niek van Hulst (Invited)</p>
16:15-16:30	<p>Vibrational dynamics of metal carbonyl complexes trapped in CH₄: a novel witness of solid methane's phase transition, Raphael Thon, Wutharath Chin, Didier Chamma, Jean-Pierre Galaup, Claudine Crépin</p>
16:30-16:45	<p>On the Fenna-Matthews-Olson Protein Complex of Green Sulfur Bacteria Adam Kell, Robert Blankenship, Ryszard Jankowiak</p>
16:45-17:15	Coffee break
17:15-19:15	Poster Session I

Tuesday, 19 July	
	Session: Plasmonics Chair: L. Bausá
8:30-9:15	The quantum realm of nanoplasmonics for active control of optoelectronics and ultra-resolved spectroscopy, Javier Aizpurua (Tutorial)
9:15-9:45	Raman Sensing and Imaging by Interference and Surface Enhancement Processes, Leo Alvarez-Fraga, Felix Jimenez-Villacorta, Esteban Climent-Pascual, Rafael Ramirez-Jimenez, Carlos Prieto, Alicia de Andres (Invited)
9:45-10:00	Effect of aggregates of silver nanostructures on the optical properties of Yb³⁺ doped RbTiOPO₄, Laura Sanchez-García, Christos Tserkezis, Maria O Ramirez, Pablo Molina, Joan Carvajal, Magdalena Aguiló, Francesc Díaz, Javier Aizpurua, Luisa Bausá
10:00-10:15	Plasmonic nanoantennas: bright and efficient nanosources A. Raj Dhawan, J. U. Esparza, C. Belacel, C. Schwob, M. Nasilowski, B. Dubertret, L. Coolen, P. Senellart, A. Maître
10:15-10:30	Ultrafast size-dependent electronic interactions in small metal nanoparticles and clusters, Paolo Maioli, Tatjana Stoll, Denis Mongin, Michel Pellarin, Matthias Hillenkamp, Michel Broyer, Aurélien Crut, Fabrice Vallée, Natalia Del Fatti
10:30-11:00	Coffee break
	Session: Sensors Chair: Hong Zhang
11:00-11:30	Controlling energy transfer and radiative lifetimes in luminescent lanthanide complexes and materials, Jean-Claude Bünzli (Invited)
11:30-12:00	Lanthanide-Doped Luminescent Nano-Bioprobes for In Vitro Detection of Tumor Markers, Xueyuan Chen, Wei Zheng, Shanyong Zhou, Datao Tu, Ping Huang, Jin Xu (Invited)
12:00-12:15	Energy transfer processes in organic-sensitized Yb-doped NaYF₄ nanoparticles, Haizhou Lu, Yu Peng, Huanqing Ye, Xianjin Cui, Mark Green, Philip Blower, Peter Wyatt, William Gillin, Ignacio Hernandez
12:15-12:30	Engineering Core/Shell Rare Earth Nanoparticles for Ultimate Control Over Light Emitting Processes, Lingdong Sun, Hao Dong, Yang Li, Chun-Hua Yan
12:30-12:45	NIR Nanomaterials for disease diagnostics and therapy, Fan Zhang
12:45-13:00	Nd³⁺ Contactless Fluorescent Temperature Sensor, Yurii Orlovskii, Kaarel Kaldvee, Stanislav Fedorenko, Laurits Puust, Alexander Vanetsev, Elena Orlovskaya, Martti Pärs, Ilmo Sildos
13:00-14:30	Lunch
	Session: Single Centers Chair: L. Coolen
14:30-15:00	Mapping of local fields in solids by phononless fluorescence spectromicroscopy of single dye molecules, Andrey Naumov, Tatiana Anikushina, Alexey Gorshelev, Maxim Gladush, Ivan Eremchev, Alina Golovanova, Lothar Kador, Jürgen Köhler (Invited)
15:00-15:30	Optical microscopy and spectroscopy of single molecules and single plasmonic gold nanoparticles, Michel Orrit (Invited)
15:30-15:45	Correlative atomic force and confocal fluorescence microscopy: Single molecule imaging and force induced spectral shifts, Thomas Basché, Sven Stöttinger, Gerald Hinze
15:45-16:00	Superradiance of molecular monolayers on insulating surfaces, Alexander Eisfeld, Alexander Paulheim, Christian Marquardt, Markus Müller, Moritz Sokolowski
16:00-16:15	Charge dynamics in organo-metal-halide perovskite nano-crystals probed by super-resolution optical micro-spectroscopy at the individual crystal level, Ivan Scheblykin, Yuxi Tian, Alexander Dobrovolsky, Daniela Täuber
16:15 16:45	Coffee break
	Session: Photovoltaic and Photocatalysis Materials Chair: D. Boye
16:45-17:15	Intrinsic optical properties of organic-inorganic hybrid perovskite MAPbI₃ and its multiple stages of spontaneous and photo-induced structure transformation, Yong Zhang (Invited)
17:15-17:45	Harvesting light through upconversion for photocatalysis applications, G. Ledoux, B. Mahler, Y. Chen, S. Mishra, E. Jeanneau, M. Daniel, J. Zhang, S. Daniele (Invited)
17:45-18:00	Exciton dynamics in perovskite CH₃NH₃PbI₃ single crystals, Le Quang Phuong, Yumi Nakaike, Atsushi Wakamiya, Yoshihiko Kanemitsu
18:00-18:15	Dynamics of the Photoexcited States in Octahedral Mo₆ Cluster Halides, Yoshiki Wada, Norio Saito, Fabien Grasset, Stephane Cordier, Karine Costuas, Naoki Ohashi
18:15-20:15	Poster Session II

Wednesday, 20 July	
	Session: Doped Insulators and Defects Chair: P. Dereń
8:30-9:00	Photon conversion in the mid-infrared for gas sensing, A. Braud, A.L. Pelé, J.L. Doualan, R. Chahal, V. Nazabal, B. Bureau, R. Moncorgé, P. Camy (Invited)
9:00-9:15	Investigation of Thermal Quenching for $Y_3Al_5O_{12}:Ce^{3+}$ by Thermoluminescence Excitation Spectroscopy, Jumpei Ueda, Pieter Dorenbos, Adrie Bos, Andries Meijerink, Tanabe Setsuhisa
9:15-9:30	Controlled Electron-Hole Trapping and Detrapping Process in $GdAlO_3$ by Valence Band Engineering, Hongde Luo, Adrie Bos, Pieter Dorenbos
9:30-9:45	Red phosphors based on hexafluorides doped with Mn^{4+}. The new act of old game with $3d^3$ system, Marek Grinberg, Sebastian Mahlik, Tadeusz Lesniewski, Agata Lazarowska, Ye Jin, Ru-Shi Liu
9:45-10:00	Mn^{4+} doped aluminate phosphors for warm white LEDs, Mingying Peng
10:00-10:15	Degradation processes in the red emitting phosphors $Na_2MF_6-Mn^{4+}$ (M = Si, Ti) exposed to thermal and blue LED irradiation stresses, Anthony Barros, Philippe Boutinaud, Geneviève Chadeyron, Rachid Mahiou
10:15-10:30	Defect luminescence and relaxation kinetics in amorphous yttrium-alumino-borate (α-YAB) phosphors, Atul D. Sontakke, Vinicius F. Guimarães, Pauline Burner, M. Salaun, Isabelle Gautier-Luneau, Lauro Maia, Alban Ferrier, Bruno Viana, and Alain Ibanez
10:30-11:00	Coffee break
	Session: High Resolution and Coherent Spectroscopy Chair: C. Thiel
11:00-11:45	Qubits in diamond: solid state quantum registers and nanoscale sensors, Fedor Jelezko (Tutorial)
11:45-12:00	Lineshape in Spectra of Xe Center in Diamond: From Helium to Room Temperatures, Yury Deshko, Anshel Gorokhovskiy
12:00-12:15	Ultra-narrow linewidth stoichiometric rare earth crystals for quantum information applications, Rose Ahlefeldt, Michael Hush, Matthew Sellars
12:15-12:30	Optical pumping in Neodymium-doped yttrium orthosilicate, Emmanuel Cruzeiro, Imam Usmani, Alexey Tiranov, Cyril Laplane, Jonathan Lavoie, Nicolas Gisin, Mikael Afzelius
12:30-12:45	High Resolution Spectroscopy of Single Erbium Sites in Silicon, Milos Rancic, Michael Reid, Matthew Sellars, Sven Rogge, Sebastian Horvath, Chunming Yin, Gabriele DeBoo, Qi Zhang
12:45-13:00	Smarter Modeling of Energy Levels of Rare-Earth Quantum-Information Candidates, M.F. Reid, S.P. Horvath, J.S. Stewart, J.-P.R. Wells
	Free afternoon

Thursday, 21 July	
	Session: Nanostructured Materials Chair: M. Bettinelli
8:30-9:00	Spin dynamics of charged and neutral excitons in colloidal nanocrystals, Dmitri Yakovlev (Invited)
9:00-9:30	Local density of states and energy transfer in nanophotonics Rémi Carminati (Invited)
9:30-9:45	Modification of phonon processes in nano-structured rare-earth-ion-doped materials, Lucile Veissier, Thomas Lutz, Charles Thiel, Philip Woodburn, Rufus Cone, Paul Barclay, Wolfgang Tittel
9:45-10:00	Spectroscopic properties of $\text{La}_{1-x}\text{Gd}_x\text{AlO}_3$ nanocrystals doped with Pr^{3+} ions K. Lemański, B. Bondzior, P.J. Dereń
10:00-10:30	Coffee break
	Session: Ultrafast Processes Chair: K. Matsuda
10:30-11:00	Hot intraband luminescence under different types of excitation Sergey Omelkov, Vitali Nagirnyi, Marco Kirm (Invited)
11:00-11:30	Collective Higgs amplitude mode in superconductors studied by strong terahertz pulse, Ryusuke Matsunaga (Invited)
11:30-12:00	Nonlinear optical spectroscopy on exciton states in model semiconductors GaAs and ZnO, Roman Pisarev (Invited)
12:00-12:15	Exciton interband relaxation observed by time-resolved cyclotron resonance in diamond, Ikuko Akimoto, Nobuko Naka
12:15-12:30	Exciton dynamics in solid ZnO: UV luminescence of ZnO crystal and nanoparticles excited by femtosecond IR, UV and VUV laser pulses, P. Martin, A.Belsky, M. Dumergue, S. Petit, D. Descamps, A. Vasil'ev
12:30-12:45	Study of Exciton Dynamics in Multifunctional Oxides, Farida Selim, Pooneh Saadatkia, Buguo Wang, David Look
12:45-14:30	Lunch
	Session: Classical and Quantum Processing Chair: R. Ahlefeldt
14:30-15:00	Optical quantum memory based on rare-earth-ion doped crystals, Mikael Afzelius (Invited)
15:00-15:15	Spin-wave storage of heralded single photons in a crystal, Alessandro Seri, Daniel Rieländer, Andreas Lenhard, Margherita Mazzera, Hugues de Riedmatten
15:15-15:30	Rare-earth-activated Materials for Optical Frequency References, Charles Thiel, Thomas Böttger, Roger Macfarlane, Rufus Cone
15:30-15:45	Acousto-optic imaging using spectral holeburning in Tm^{3+}:YAG crystals, J.- B. Laudereau, A. Chauvet, A. Ferrier, Ph. Goldner, T. Chanelière, F. Ramaz
15:45-16:00	Towards quantum frequency conversion between atoms and light using rare earth ion dopants using cavity enhanced Raman heterodyne spectroscopy, Jevon Longdell, Xavier Fernandez-Gonzalvo, Yu-Hui Chen, Chunming Yin, Sven Rogge
16:00-16:15	Slow light based optical frequency shifter, Qian Li, Yupan Bao, Axel Thuresson, Adam Nilsson, Lars Rippe, Stefan Kröll
16:15-16:45	Coffee break
	Session: Rare Earth Doped Materials Chair: Xueyuan Chen
16:45-17:15	Energy Migration Upconversion in Spatially Separated Doping Nanostructures, Hong Zhang, Langping Tu, Fei Wu, Jing Zuo, Xiaomin Liu, Xianggui Kong (Invited)
17:15-17:45	Controlling Photon Upconversion in Lanthanide-doped Nanocrystals, Xiaogang Liu (Invited)
17:45-18:00	Modelling Blue to UV Upconversion in $\beta\text{-NaYF}_4: 0.3\% \text{Tm}^{3+}$ Pedro Villanueva-Delgado, Karl W. Krämer, Rafael Valiente
18:00-18:15	Design rules for multiple d-f emission bands in lanthanides, Mathijs de Jong, Daniel Biner, Karl Krämer, Zoila Barandiarán, Luis Seijo, Andries Meijerink
18:15-18:30	High pressure study of cooperative luminescence of $\text{CaAl}_4\text{O}_7:\text{Yb}^{3+}$, Andrzej Suchocki, Dawid Jankowski, Małgorzata Puchalska, Artem Bercha, Witold Trzeciakowski
19:30	Conference Dinner

Friday, 22 July	
	Session: Semi-Conductors Chair: R. Pisarev
8:45-9:30	Novel Optical Excited States of Nano-carbon and Atomically Thin Two-dimensional Materials Kazunari Matsuda (Tutorial)
9:30-10:00	Mid-infrared absorption imaging of a quantum degenerate exciton gas in cuprous oxide at 100 mK, Kosuke Yoshioka (Invited)
10:00-10:15	Polariton-condensation effects on photoluminescence dynamics in a CuBr microcavity, Masaaki Nakayama, Katsuya Murakami, Yoshiaki Furukawa
10:15-10:30	Is there inter-valley Auger recombination in InGaAs/InP quantum wells?, Yuri Pusep, Marco Tito, Alfred Gold, Marcio Teodoro, Gilmar Marques, Ray LaPierre
10:30-10:45	Emission properties of GaN/AlN multi-quantum-wells under high hydrostatic pressure – experimental and ab-initio comparative study, Agata Kaminska, Dawid Jankowski, Pawel Strak, Krzysztof Korona, Jolanta Borysiuk, Ewa Grzanka, Mark Beeler, Konrad Sakowski, Eva Monroy, Stanislaw Krukowski
10:45-11:15	Coffee break
	Session: Molecular Systems Chair: J.-P. Galaup
11:15-11:45	Pressure induced mechano-chemistry in molecular solids, Eric L. Chronister, Andrew Rice, Sebastian Jezowski (Invited)
11:45-12:00	Excitation-induced processes in model molecular solid N₂, E.V. Savchenko, I.V. Khyzhniy, S.A. Uytunov, M.A. Bludov, A.P. Barabashov, G.B. Gumenchuk and V.E. Bondybey
12:00-12:15	Vibronic Spectra of Frenkel Excitons in a 2-Dimensional Polyacene Lattice, Thomas Hartmann, Christoph Warns, Ivan Lalov, Peter Reineker
12:15-12:30	Experimental Evidence of Enhancement of Optical Magnetization by Magnetic Torque Stephen Rand, E.F.C. Dreyer, P. Anisimov, A.A. Fisher
12:30-13:00	Closing Ceremony