

Sunday 20 <sup>th</sup> of August	Monday 21 <sup>st</sup> of August			Tuesday 22 <sup>nd</sup> of August			Wednesday 23 <sup>rd</sup> of August				Thursday 24 <sup>th</sup> of August				Friday 25 <sup>th</sup> of August			Saturday 26 <sup>th</sup> of August	
	Plenary session I: FEL, HHG, dynamics (Saalasti hall) Chair: Wolfgang Eberhardt			Plenary session II: Correlated systems, Spin and Magnetism (Saalasti hall) Chair: Zahid Hussain			Plenary session III: Material & Surface Science, Ambient Pressure, Liquids, AMO (Saalasti hall) Chair: Maria-Novella Piancastelli				Plenary IV: Theory (Saalasti hall) Chair: Faris Gel'mukhanov				Plenary V: STM & related techniques, HAXPES imaging, spectromicroscopy (Saalasti hall) Chair: Toyohiko Kinoshita			Excursion day	
	09:00-09:45	Hyunjung Kim: Time-resolved in situ studies of catalysis		09:00-09:45	Takeshi Kondo: Fascinating electronic structures of exotic magnets revealed by ARPES		09:00-09:45	Thomas Pfeifer: Spectroscopy and control of electronic structure in atoms and molecules with intense laser fields from atto-to-femtoseconds, and beyond			09:00-09:45	Michael Odelius: Photodissociation of ironpentacarbonyl - Fe(CO) <sub>5</sub> - from initial bursts of CO release to branching pathways in solution			09:00-09:45	Gerd Schönhense: HAXPES with Full-Field k-Imaging with Time-of-Flight Recording			
	09:45-10:30	Linda Young: Probing chemical processes in water		09:45-10:30	Di-Jing Huang: Elementary excitations of quantum materials probed with high-resolution RIXS		09:45-10:30	Simone Techert: Water-Splitting Catalysts in Real Time and During Operation			09:45-10:30	Patrick Rinke: ARTIST: Artificial Intelligence for Spectroscopy			09:45-10:30	Tomohiro Matsushita: Photoelectron holography with atomic resolution			
	10:30-11:00	Coffee		10:30-11:00	Coffee		10:30-11:00	Coffee			10:30-11:00	Coffee			10:30-11:00	Coffee			
	Parallel AMO (Lecture hall L2) 11:00-12:30 Chair: Viktor Kimberg		Parallel Spin & Magnetism (Saalasti Hall) 11:00-12:30 Chair: Hubert Ebert	Parallel Materials science methods (Lecture hall L2) 11:00-12:30 Chair: Sari Granroth		Parallel RIXS (Saalasti Hall) 11:00-12:40 Chair: Marc Simon	Parallel Correlated systems & superconductors (Lecture hall L2) 11:00-12:40 Chair: Shuyun Zhou		Parallel Ambient & In-situ spectroscopy (Saalasti Hall) 11:00-12:30 Chair: Arnaldo Naves de Brito		Parallel HAXPES (Lecture hall L2) 11:00-12:40 Chair: Joachim Schnadt		Parallel Liquids and chemistry (Saalasti Hall) 11:00-12:30 Chair: Yoshihisa Harada		Parallel Environmental molecular science (Lecture hall L2) 11:00-12:30 Chair: Hendrik Bluhm	Chuck Fadley Memorial Photoelectron diffraction (Saalasti Hall) 11:00-12:40 Chair: Hiroshi Daimon			
	12:30-14:00	Lunch		12:30-14:00	Lunch	12:40-14:00	Lunch	12:40-14:00	Lunch	12:30-14:00	Lunch	12:40-14:00	Lunch	12:30-14:00	Lunch	12:40-13:00	Closing remarks and awards (Saalasti Hall)		
																	13:00-14:00		Lunch
	Parallel Dynamics, FEL, HHG (Lecture Hall L2) 14:00-14:50 Chair: Tatiana Marchenko		Parallel Material & Surface Science (Saalasti Hall) 14:00-14:50 Chair: Kenta Amemiya	Conference photo 14:00 (Agora) Posters 14:00-16:30 (Agora)			Excursion to Hailuoto				Parallel Spectromicroscopy & microspectroscopy (Lecture hall L2) 14:00-14:50 Chair: Nobuhiro Kosugi		Parallel Theory (Saalasti Hall) 14:00-14:50 Chair: Aki Pulkkinen						
	14:50-15:20	Coffee									14:50-15:20	Coffee							
	Parallel Dynamics, FEL, HHG (Lecture Hall L2) 15:20-16:10 Chair: Tatiana Marchenko		Parallel Material & Surface Science (Saalasti Hall) 15:20-16:10 Chair: Kenta Amemiya								Parallel Spectromicroscopy & microspectroscopy (Lecture hall L2) 15:20-16:10 Chair: Nobuhiro Kosugi		Parallel Theory (Saalasti Hall) 15:20-16:10 Chair: Aki Pulkkinen						
18:00-21:00	>Welcome reception (Radisson Blu Hotel)	17:30-18:30 Public lecture by Wolfgang Eberhardt (Oulu Theatre, Pikkisali) Chair: Marko Huttula																	
		19:00 - 21:00 City reception (Oulu Music Centre, Preludi)									19:00-23:00 Banquet (Radisson Blu)								

## Sunday 20<sup>th</sup> of August

<b>18:00 - 19:00</b>	Welcome reception & Get Together <b>@ Radisson Blu hotel</b>	<b>Conference registration @ Radisson Blu hotel</b>
<b>18:30 - 19:00</b>	Acoustic Guitar Performance (Set #1)	
<b>19:00 - 19:15</b>	Opening Words by the University of Oulu	
<b>19:15 - 21:00</b>	Welcome reception & Get together Continues	
<b>19:30 - 20:00</b>	Acoustic Guitar Performance (Set #2)	

**Monday 21<sup>st</sup> of August**

**Plenary session I: FEL, HHG, dynamics (Saalasti hall) Chair: Wolfgang Eberhardt**

09:00 - 09:45	<b>Hyunjung Kim:</b> <i>Time-resolved in situ studies of catalysis</i>
09:45 - 10:30	<b>Linda Young:</b> <i>Probing chemical processes in water</i>
10:30 - 11:00	Coffee

<b>Parallel AMO (Lecture hall L2) Chair: Viktor Kimberg</b>		<b>Parallel Spin &amp; Magnetism (Saalasti Hall) Chair: Zahid Hussain</b>	
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11:00 - 11:30	<b>Oksana Plekan:</b> <i>Probing molecular dynamics of uracil by time-resolved X-ray photoelectron spectroscopy</i>	11:00-11:30	<b>Bum Joon Kim:</b> <i>Quantum Spin Nematic Phase in a Square-lattice Iridate</i>
11:30 - 11:50	Catmarna Küstner-Wetekam: <i>Quantification of interatomic Coulombic decay efficiency after inner-shell photoionization of krypton clusters</i>	11:30-11:50	Mohammed Qahosh: <i>Establishing fundamentals of ARPES spin textures with the model material PtTe2</i>
11:50 - 12:10	Geraldine Feraud: <i>Indirect X-ray photodesorption from ices</i>	11:50-12:10	Kenta Amemiya: <i>Determination of anisotropic magnetic moments at the interface by means of depth-resolved x-ray magnetic circular dichroism</i>
12:10 - 12:30	Abhishek Verma: <i>Experimental study of second step Auger decay in Kr after core 1s excitation</i>	12:10-12:30	Markus Donath: <i>Tamm and Shockley surface states at Re(0001): two paradigmatically different types of states mixed by spin-orbit interaction</i>

12:30-14:00	Lunch		
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<b>Parallel Dynamics, FEL, HHG (Lecture Hall L2) Chair: Tatiana Marchenko</b>		<b>Parallel Material&amp;Surface Science (Saalasti Hall) Chair: Kenta Amemiya</b>	
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14:00 - 14:30	<b>Valerie Blanchet:</b> <i>Dynamical interplay between molecular chirality and electrons</i>	14:00-14:30	<b>Shuyun Zhou:</b> <i>Floquet engineering of a model semiconductor</i>
14:30 - 14:50	Victor Kimberg: <i>Photoelectron recoil-induced rotation: Cohen-Fano and multichannel interference effects</i>	14:30-14:50	Alice Kunin: <i>Direct visualization of charge transfer and hybridized excitons in twisted MoSe2/WS2 bilayers</i>
14:50 - 15:20	Coffee	14:50-15:20	Coffee

15:20 - 15:50	<b>David Reis:</b> <i>Using x-ray FELs to imagine strong-field optical processes</i>	15:20-15:50	<b>Regina Dittmann:</b> <i>Uncovering switching and failure mechanisms of redox-based memristive devices by in-situ spectroscopy</i>
15:50 - 16:10	Andreas Lindblad: <i>Hard X-ray core-hole clock spectroscopy and charge transfer processes</i>	15:50-16:10	Olena Tkach: <i>Circular Dichroism in Hard X-ray Photoelectron Diffraction Observed by Time-of-Flight Momentum Microscopy</i>

17:30 - 18:30	Public lecture (Oulu Theatre, Pikisali) Chair: Marko Huttula	<b>Wolfgang Eberhardt:</b> <i>Designing the Energy System of the Future</i>	
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19:00 - 21:00	City reception, Oulu Music Centre, Preludi		
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**Conference registration 8:00 - 15:30**

**Tuesday 22<sup>nd</sup> of August**

**Plenary session II: Correlated systems, Spin and Magnetism (Saalasti hall) Chair: Zahid Hussain**

09:00-09:45	<b>Takeshi Kondo:</b> <i>Fascinating electronic structures of exotic magnets revealed by ARPES</i>		
09:45-10:30	<b>Di-Jing Huang:</b> <i>Elementary excitations of quantum materials probed with high-resolution</i>		
10:30-11:00	Coffee		
<b>Parallel Materials science methods (Lecture hall L2)</b> <i>Chair: Sari Granroth</i>		<b>Parallel RIXS (Saalasti Hall) Chair: Marc Simon</b>	
11:00-11:30	<b>Antonija Grubišić-Čabo:</b> <i>Kinetic In-situ Synthesis (KISS) technique of large-area 2D materials exfoliation</i>	11:00-11:30	<b>Yoshihisa Harada:</b> <i>Soft X-ray Emission Spectroscopy of Water at Interfaces</i>
11:30-11:50	Tuomas Alatarvas: <i>Application of In-situ High Temperature Environmental Scanning Electron Microscopy for Characterising Non-metallic Inclusions within Steel</i>	11:30-12:00	<b>Wanli Yang:</b> <i>RIXS of high-energy battery electrodes: novel states in highly oxidized transition metal oxides</i>
11:50-12:10	Constantin Wansorra: <i>Are calculated partial photoionization cross sections good enough for (HAX)PES applications</i>	12:00-12:20	Régis Decker: <i>Using X-ray emission spectroscopy to measure the electron-phonon scattering rates in the demagnetization transient state of ferromagnets</i>
12:10-12:30	Alessandro Ruocco: <i>Transmission through Graphene of Electrons in the 30 - 900 eV Range</i>	12:20-12:40	Faris Gel'mukhanov: <i>Young's double slit interference in resonant Auger/X-ray scattering and the Bohr's complementary: new results</i>
12:30-14:00	Lunch	12:40-14:00	Lunch
	<b>Conference Photo 14:00 (Agora)</b>	<b>Poster session 14:00-16:30 (Agora)</b>	

**Wednesday 23<sup>rd</sup> of August**

<b>Plenary session III: Material &amp; Surface Science, Ambient Pressure, Liquids, AMO (Saalasti hall) Chair: Maria-Novella Piancastelli</b>			
09:00-09:45	<b>Thomas Pfeifer:</b> <i>Spectroscopy and control of electronic structure in atoms and molecules with intense laser fields from atto-to-femtoseconds, and beyond</i>		
09:45-10:30	<b>Simone Techert:</b> <i>Water-Splitting Catalysts in Real Time and During Operation</i>		
10:30-11:00	Coffee		
<b>Parallel Correlated systems &amp; superconductors (Lecture hall L2) Chair: Shuyun Zhou</b>		<b>Parallel Ambient &amp; In-situ spectroscopy (Saalasti Hall) Chair: Arnaldo Naves de Brito</b>	
11:00-11:30	<b>Dong-Lai Feng:</b> <i>Strong electron-boson interactions in oxide superconductors and magnetic materials</i>	11:00-11:30	<b>Hendrik Bluhm:</b> <i>Investigation of Liquid-Vapor Interfaces Using Photoelectron Spectroscopy</i>
11:30-12:00	<b>Kyoko Ishizaka:</b> <i>Micro-focused ARPES study on 2D transition-metal dichalcogenides</i>	11:30-11:50	Andrey Shavorskiy: <i>Event-averaged time-resolved APXPS with chemical perturbations: studying gas/solid processes with a microsecond time resolution</i>
12:00-12:20	Marco Caputo: <i>Proximity-Induced Novel Ferromagnetism and Metallicity in NdNiO<sub>3</sub> Heterostructure</i>	11:50-12:10	Henri Pauna: <i>Applied physics in the steel industry – optical emission spectroscopy as a method for advanced process control</i>
12:20-12:40	Francesco Rosa: <i>Infinite-layer nickelate superconductors studied with Resonant Inelastic X-ray Scattering</i>	12:10-12:30	Esko Kokkonen: <i>Using Ambient Pressure XPS to study ALD in real-time</i>
12:40-14:00	Lunch	12:30-14:00	Lunch
	Excursion		

Thursday 24<sup>th</sup> of August

Plenary IV: Theory (Saalasti hall) Chair: Faris Gel'mukhanov

09:00-09:45	<b>Michael Odelius:</b> Photodissociation of ironpentacarbonyl - Fe(CO) <sub>5</sub> - from initial bursts of CO release to branching pathways in solution		
09:45-10:30	<b>Patrick Rinke:</b> ARTIST: Artificial Intelligence for Spectroscopy		
10:30-11:00	Coffee		
Parallel <b>HAXPES (Lecture hall L2)</b> Chair: Joachim Schnadt		Parallel <b>Liquids and chemistry (Saalasti Hall)</b> Chair: Yoshihisa Harada	
11:00-11:30	<b>Tatiana Marchenko:</b> Hard X-ray Photoelectron Spectroscopy probing photoionisation dynamics	11:00-11:30	<b>Arnaldo Naves de Brito:</b> Insights into the Molecular Composition of Ethanol-Water Liquid Mixtures through Electron Spectroscopy
11:30-12:00	<b>Aki Pulkkinen:</b> Theoretical description of soft and hard x-ray photoemission spectroscopy using the one-step model of photoemission	11:30-11:50	Robert Temperton: Oxidation of transition metal complexes in solution by resonant X-ray spectroscopy and operando electrochemistry
12:00-12:20	Ibrahima Gueye: Probing Halide Ion Transport and Metal Corrosion Process in Halide Perovskite Solar Cells via In Operando Hard X-ray Photoelectron Spectroscopy	11:50-12:10	Lukás Tomaník: Aqueous-phase photoemission for chemical analysis
12:20-12:40	Fredrik O.L. Johansson: Resonant Auger spectroscopy on solid xenon on Au, Ag, and Cu substrates	12:10-12:30	Nour El Houda Azzouza: Study of the electronic structure of iron metal complexes in aqueous solution by X-ray spectroscopies
12:40-14:00	Lunch	12:30-14:00	Lunch
Parallel <b>Spectromicroscopy &amp; microspectroscopy (Lecture hall L2)</b> Chair: Nobuhiro Kosugi		Parallel <b>Theory (Saalasti Hall)</b> Chair: Aki Pulkkinen	
14:00-14:30	<b>Stephen Urquhart:</b> Exploring Phase in Soft X-ray Spectroptychography	14:00-14:30	<b>Nađa Došlić:</b> Efficient simulation of photoelectron spectra with trajectory surface hopping
14:30-14:50	Adam Hitchcock: In-situ spectromicroscopy studies of Cu catalysed CO <sub>2</sub> electroreduction by soft X-ray STXM and spectro-ptychography	14:30-14:50	Matti Alatalo: First Principles Calculations of the Optical Response of LiNiO <sub>2</sub> – a promising cathode material in Cobalt free Lithium ion batteries
14:50-15:20	Coffee	14:50-15:20	Coffee
15:20-15:50	<b>Koichi Hayashi:</b> Applications of X-ray/neutron holography to semiconductor defect evaluations	15:20-15:50	<b>Yao Wang:</b> Ultrafast Control of Entanglement Enabled by Time-Resolved RIXS
15:50-16:10	Lukasz Plucinski: Photoemission study of twisted monolayers and bilayers of WSe <sub>2</sub> on graphite substrates	15:50-16:10	Sneha Verma: Quantification on Uncertainty in Deep Learning Neural Network while Predicting X-ray Absorption Spectra
19:00	Banquet (Radisson Blu)		

**Friday 25<sup>th</sup> of August**

**Plenary V: STM & related techniques, HAXPES imaging, spectromicroscopy (Saalasti hall) Chair: Toyohiko Kinoshita**

09:00-09:45	<b>Gerd Schönhense:</b> <i>HAXPES with Full-Field k-Imaging with Time-of-Flight Recording</i>		
09:45-10:30	<b>Tomohiro Matsushita:</b> <i>Photoelectron holography with atomic resolution</i>		
10:30-11:00	Coffee		
<b>Parallel Environmental molecular science (Lecture hall L2) 11:00-12:30</b>		<b>Chuck Fadley Memorial Photoelectron diffraction (Saalasti Hall) 11:00-12:40</b>	
11:00-11:30	<b>Markus Ammann:</b> <i>Molecular Environmental Surface Science</i>	11:00-11:20	<b>Hiroshi Daimon:</b> <i>Progress of atomic-resolution holography and new analyzer CoDELMA</i>
11:30-11:50	Noelle Walsh: <i>Opportunities for gas-phase, liquid-phase and aerosol research at MAX IV</i>	11:20-11:40	<b>Michel van Hove (video):</b> <i>Memories of the 1990s and 2000s</i>
11:50-12:10	Raimund Feifel: <i>Abiotic molecular oxygen production - ionic pathway from SO<sub>2</sub></i>	11:40-12:00	<b>John J. Rehr (video):</b> <i>Rehr-Albers approach to Photoelectron Diffraction</i>
12:10-12:30	Rainer Pärna: <i>VUV-induced fragmentation and electronic structure of phenoxy herbicides</i>	12:00-12:20	<b>Eli Rotenberg:</b> <i>In Operando Measurements on Complex Materials Explored With nanoARPES</i>
		12:20-12:40	<b>Slavomir Nemsak:</b> <i>Photoelectron spectroscopy modalities for studying complex materials</i>
12:40-13:00	<b>Closing remarks and awards (Saalasti Hall)</b>		
13:00-14:00	Lunch		