

Monday
10 September 2018

	Mini Oral Theaterette 1	Theme	Mini Oral Theaterette 2	Theme	Mini Oral Theaterette 3	Theme	Mini Oral Theaterette 4	Theme	
13:00	1336: Crystallographic orientation maps obtained from ion and backscattered electron channeling contrast A/Prof Cyril LANGLOIS	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	1866: Vesicle secretion by ependymal cilia in brain ventricle: unsuspected roles for a neglected structure Prof Dr Rita Sinigaglia	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	1889: Drift-dominant Li transport in a nanowire battery observed by operando EELS Dr Soyeon Lee	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	977: Depletion of critical raw elements from surface of superalloy IN100 during hot isostatic pressing A/Prof Dragan Rajnovic	Physical Sciences (PS4 - Metals and alloys)	13:00
13:05	678: Size tunable Si/SiGe nanowire heterostructures Mr Minh AnhLuong	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	1911: Control of bacterial adhesion and distribution on Ti-6Al-4V surfaces by fracture topography. Dr Peter Hines	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	634: In-situ characterization of supported of GaPd2 catalyst for methanol synthesis Dr Elisabetta Maria Fiordaliso	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	346: Uncovering the role of solute-trapped vacancies on precipitation pathways in Al-Cu-In-Sb alloy Mr Yong Zhang	Physical Sciences (PS4 - Metals and alloys)	13:05
13:10	1845: Extreme Ultraviolet-Assisted Field Ion Evaporation Dr Ann Chiaramonti	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1884: Histomorphometric evaluation of the effects of alveolar decortication amount on Orthodontic Tooth Movement in rat Dr Alev Cumbul	Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)	85: In situ STEM-EELS observation in an all-solid-state lithium-ion battery Mr Yuki Nomura	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	1353: Twin-jet electropolishing of Ni-Ti microwires Prof Dominique Schryvers	Physical Sciences (PS4 - Metals and alloys)	13:10
13:15	265: New Insights into Gradient Nanostructures of Ferrite in a Duplex Stainless Steels Prof Gang Sha	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1909: Imaging Metal-Organic Frameworks Using Electron Microscopy Prof Yihan Zhu	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1827: Atom-by-atom Fabrication of Monolayer Molybdenum Membranes Mr Xiaoxu Zhao	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	515: Interaction of dislocations and elastic strain measured by TEM around nanoprecipitates in Al alloys Prof Joël DOUIN	Physical Sciences (PS4 - Metals and alloys)	13:15
13:20	400: Operando gas TEM for the study of Ni nano-catalysts during the Sabatier reaction Prof Ovidiu Ersen	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	327: Ultrathin Au-Alloy Nanowires: Exploring their Structure and Chemistry at the Atomic Scale Miss Dipanwita Chatterjee	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1274: Fabrication of nanopores in monolayer graphene with controllable edge structures Dr Xiaobin Zhang	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	1905: Atomic structure of pyrochlore or perovskite structured oxides using quantitative STEM and atomic resolution EELS/EDX Dr Ali Mostaed	Physical Sciences (PS5 - Ceramics and inorganic composites)	13:20
13:25	1898: Serial Electron Nanocrystallography in a Transmission Electron Microscope Dr RobertBücker	Instrumentation and Techniques (IT6 - Diffraction techniques)	63: Electron spectroscopy and defects of hollow boron nitride frameworks Mr Julian Strobel	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	923: Electron Microscopy as a means to validate Raman spectroscopy for qualifying single-walled carbon nanotubes Dr Hua Jiang	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	1214: Abnormal Cracking of Layered LiCoO2 Particle during Extreme Lithium Extraction Mr Juhyun Oh	Physical Sciences (PS5 - Ceramics and inorganic composites)	13:25
13:30	1618: Electron and NMR nanocrystallography to solve structures of organic nanocrystals Dr Yusuke Nishiyama	Instrumentation and Techniques (IT6 - Diffraction techniques)	1844: Emergent topological defects and charge ordering in hexagonal manganite Dr Shaobo Cheng	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	1825: Microstructure and Performance Characterization of YBCO Coated Conductors with A Single Zr-doped Ceria Buffer Architecture Prof Dr Li Lei	Physical Sciences (PS3 - Thin films, coatings and surfaces)	1868: A novel procedure for 3D crystallographic and chemical characterisation of polymeric coating using analytical PFIB Ms Xiangli Zhong	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	13:30
13:35	371: Preparation of single-cell samples for SBF-SEM; a novel multi-technique approach using MicroCT. Ms Harriet Swearman	Instrumentation and Techniques (IT7 - Multi-scale 3D imaging)	1384: In situ Heating Lorentz TEM of FeRh Thin Films Dr Christian Kübel	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	241: In situ study of hydrogen-induced cavity/blister nucleation and growth at metal/oxide interface Dr DegangXie	Physical Sciences (PS3 - Thin films, coatings and surfaces)	1186: Cross sectional cathodoluminescence study for structured materials Prof Takashi Sekiguchi	Physical Sciences (PS7 - Semiconductors and materials for communication)	13:35
13:40	1028: Low energy STEM allows watching the conjugation process of nanoparticles with biomolecules. Mrs Jana Nebesarova	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	146: Correlative microscopy of an 850 million-year-old microbial community Ms Kate Eiloart	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)	610: Influence of Texture on TRIP behavior of Ultrafine Duplex rich-Mn AHSS Mr Mehdi Eizadjou	Physical Sciences (PS8 - Phase transformations and corrosion)	302: Strain analysis of 3D structured semiconductor device by STEM moiré method Mr Noriaki Endo	Physical Sciences (PS7 - Semiconductors and materials for communication)	13:40
13:45	887: Oxygen sub-lattice occupancy in thin cuprate films Dr Vesna Srot	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	778: Characterizing carbon nanotube mat supercapacitor electrode 3D-morphology with high resolution electron tomography Mr Ben Mapleback	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	579: Crystallization of amorphous TiO2 nanotubes - TEM studies by in situ and ex situ heating Dr Alberto Casu	Physical Sciences (PS8 - Phase transformations and corrosion)			13:45

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	Mini Oral Theaterette 1	Theme	Mini Oral Theaterette 2	Theme	Mini Oral Theaterette 3	Theme	Mini Oral Theaterette 4	Theme	
16:15	482: Teaching contemporary microscopy for postgraduate coursework : shaping the work ready graduates of the future Dr Michael Johnson	Frontier Issues (FI3 - Facility management)	202: Evaluation of filtered-STEM performances for biology Miss Amandine Verguet	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	159: Effect of precipitant on the morphology of magnesium hydroxide nanosheets and magnesium oxide nanoparticles synthesized via chemical precipitation Mr Alaa Kamaluldeen	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1847: Investigating wear and failure mechanisms at high resolution using an in situ TEM nanotribometer Dr Eric Hintsala	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	16:15
16:20	628: High speed characterisation of Earth and planetary science samples using a CMOS-based EBSD detector Dr Pat Trimby	Instrumentation and Techniques (IT1 - Instrumentation)	1012: Optimization of Two-Dimensional Scanning Moiré Patterns for Strain Mapping by Adaptive Sampling Dr Benedikt Haas	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	461: Visualizing core-shell structure of heavily doped silicon quantum dots by electron microscope using atomically thin support film Dr Hiroshi Sugimoto	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	649: Probing the surfaces of nanostructures under reactive environments Dr Thomas Wilum Hansen	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	16:20
16:25	319: Electron beam broadening in thin samples in a scanning electron microscope Mrs Milena Hugenschmidt	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	615: Development of fast pixelated STEM detector and its applications for visualization of electromagnetic field and ptychographic reconstruction using 4D dataset Dr Ryusuke Sagawa	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1094: Microstructure of boron and phosphorus co-doped colloidal silicon nanocrystals Dr Keita Nomoto	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	361: Structural transformation of wurtzite (Ga,Mn)As nanowires shells under in-situ TEM annealing experiment Miss Anna Kaleta	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	16:25
16:30	39: Investigation of dopant concentration measurement by FE-SEM/EDS. Mr Yuji Konyuba	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	986: High Contrast Annular STEM Imaging for Light Elements by a Segmented Detector Mr Kousuke Ooe	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1509: Symmetry Breaking and the Role of Cu ²⁺ in Gold Nanocube Growth Mr WEILUN LI	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	835: High-temperature thermal evolution of nanostructured thermoelectrics observed by in-situ electron microscopy Mr Robert Webster	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	16:30
16:35	1882: Direct Observation of Hydrogen at Grain Boundaries in Multicrystalline Silicon Mr David Tweddle	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1079: Differential Phase Contrast Imaging with a Universal Detector Dr Jordan Hachtel	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	189: Structural properties and ELNES of nanoporous high-purity Mg ₃ N ₂ Miss Olivia Wenzel	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1896: One-Dimensional Chains and Double Helices of Cesium Iodide in Ultra-Narrow Carbon Nanotubes Dr Reza Kashtiban	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	16:35
16:40	1397: "Project Pattern" - an open access online tool for spatial analysis of immunolabeling in electron microscopy. Mr Dominik Pinkas	Instrumentation and Techniques (IT2 - Computational methods for data acquisition, analysis and visualisation)	1842: Serial block-face Imaging with Focal Charge Compensation ensures high Quality Images of biological structures in Charge-prone samples Dr Alexandra Elli	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	1272: Observation of the dynamic behaviors of ions and liquid structures in ionic liquids Dr Tomohiro Miyata	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1453: Characterization by Different Techniques of Multiwall Carbon Nanotubes Functionalized with Metal Nanoparticles Dr Vicente Garibay - Febles	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	16:40
16:45	739: Practical considerations for the validation of spatial alignment during routine CLEM Dr Benjamin Padman	Instrumentation and Techniques (IT3 - Methods and workflows for correlative microscopy)	1242: New live imaging combined 3D-CLEM revealed a quick response of mitochondrial transformation from tubular to a globular form after loss of membrane potential A/Prof Keisuke Ohta	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	64: Heavy Ln-phosphate - unexpected glue of octahedron-like ceria based mixed oxides. Dr Malgorzata Malecka	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	188: Structural properties of novel tungsten nitride nanosheets Miss Olivia Wenzel	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	16:45
16:50	463: Towards High-Frequency Electrical Specimen Stimulation for Time-Resolved Electron Microscopy Mr Tolga Wagner	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	1902: Cell pattern and cell wall modifications in plants determine apoplasmic barrier formation Dr Michal Martinka	Life Sciences (LS-10 - Plant Science & Mycology)	853: Conductive scanning probe microscopy of the semicontinuous gold film: Revealing nanoinsulator, electronic-band structure, and supportive layer-enabled charge transfer. Dr Kitiphat Sinthipharakoon	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1082: Electron energy loss spectroscopy study of O K-edge at SiO ₂ /GaN interfaces Mr Koichi Higashimine	Physical Sciences (PS3 - Thin films, coatings and surfaces)	16:50
16:55	323: Determination of Surface Dynamics on CeO ₂ Nanoparticles using Time-Resolved High-Resolution TEM Mr Ethan Lawrence	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	1814: Helium ion microscopy and high-resolution scanning electron microscopy imaging revealed new characteristics of the fine organization of cytoskeleton of Giardia intestinalis Prof Wanderleyde Souza	Life Sciences (LS-13 - Invertebrate Biology & Taxonomy)	1277: Mapping the Element-specific Interlayer Magnetic Coupling in DyFe ₂ /YFe ₂ Superlattices by Transmitted Electrons Dr Xiaoxiao Fu	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	561: Oxygen 1s excitation in a strongly spin-orbit coupled SrTiO ₃ system Dr Shaobo Cheng	Physical Sciences (PS3 - Thin films, coatings and surfaces)	16:55
17:00	148: Experimentally refined density functional theory on strongly correlated materials Mr Ding Peng	Instrumentation and Techniques (IT6 - Diffraction techniques)	1799: Human African Trypanosomiasis evolution and Cell Death in Trypanosome brucei Prof David Perez-Morga	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	1054: The scanning electron microscope as nanofactory - Direct-write deposition of single domain nanomagnets Dr Mostafa M Shawrav	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	1551: Octahedral tilting and polar distortion coupling in ultrathin films Mr Jinhyuk Jang	Physical Sciences (PS3 - Thin films, coatings and surfaces)	17:00

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17:05	468: Direct determination of coherent electron source performances based on double biprism interferometry performed in splitting CBED configuration Dr Florent Houdellier	Instrumentation and Techniques (IT6 - Diffraction techniques)	51: During African horse sickness virus infection the virus inclusion bodies contribute to host translation suppression by sequestering ribosomes and compartmentalising viral translation. Dr Eudri Venter	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	417: Ferromagnetic, ferroelectric and multiferroic nanostructures: in-field MFM and PFM characterisation Prof Bernard Nysten	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	1862: Investigation of the complex phase mixture of Cu-Ga alloys by means of X-ray Kossel diffraction in the SEM Dr Enrico Langer	Physical Sciences (PS4 - Metals and alloys)	17:05
17:10	31: Quantitative characterization of nanostructured materials using SEM techniques Dr Laurie Palasse	Instrumentation and Techniques (IT6 - Diffraction techniques)	143: Examining macrophage cell surface features using advanced Lattice Lightsheet Microscopy Mr Nicholas Condon	Life Sciences (LS-2 - Multiplex Live Imaging of Cells, Tissues & Organisms)	1072: Imaging conducting domain wall dynamics at the atomic scale Dr Michele Conroy	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	1237: The light microscopy study by heat tinting of austempered ductile iron microstructure transformation at low temperatures A/Prof Dragan Rajnovic	Physical Sciences (PS4 - Metals and alloys)	17:10
17:15	564: Accurate Determination of the Lattice Constant Deviation at Nanoscale by Diffraction Mapping Dr Raman Bekarevich	Instrumentation and Techniques (IT6 - Diffraction techniques)	1811: Studying EATR Complexes and Components Using the Molecular Horizons Cryo-EM Facilities Dr Gökhan Tolun	Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)	255: Analysis of magnetic domains using small-angle electron diffraction Prof Shigeo Mori	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	442: Atom probe characterization of strengthening effects in the Ni-based superalloy Inconel 718 Mr Felix Theska	Physical Sciences (PS4 - Metals and alloys)	17:15
17:20	844: Evaluation of grain boundary plane distribution in yttria stabilized polycrystalline zirconia based on 3D EBSD analysis Prof Marek Faryna	Instrumentation and Techniques (IT6 - Diffraction techniques)	1810: Real-time monitoring in a single-molecule level of the streptavidin-biotin near-equilibrium dynamics using atomic force microscopy in high temporal resolution Mr Evan Angelo Mondarte	Life Sciences (LS-4 - Atomic Force Microscopy in Molecular and Cell Biology)	1267: Focused electron beam induced deposition and Lorentz microscopy investigation of bi-magnetic core-shell nanostructures Dr Trevor Almeida	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	288: Microstructural evolution in austenitic stainless steels biomaterials during processing under industrial continuous cooling conditions: Effect of the soaking temperature and interpass times Prof Alberto Moreira Jorge Junior	Physical Sciences (PS4 - Metals and alloys)	17:20
17:25	811: Organ clearing and biphotonic microscopy to investigate the central nervous system and peripheral organs with preservation of GFP and Harmonic signals Mr Romain Fleurisson	Instrumentation and Techniques (IT7 - Multi-scale 3D imaging)	1213: TIRF and photoactivation microscopy reveal the recruitment of the sorting nexin 9 to CD28 microcluster in activated T cells Miss Manuela Ecker	Life Sciences (LS-5 - Cellular Transport & Dynamics)	1581: Re-evaluating the classifications of opals using a multi-technique approach Dr Jason Gascooke	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)	1579: In-situ precipitation and transformation of TCP phases in Ni-base single crystal superalloy during thermal exposure Prof Zhi-Quan Liu	Physical Sciences (PS4 - Metals and alloys)	17:25
17:30	1818: Generation of non-diffracting Bessel beams with amorphous carbon phase masks Mr Lukas Grünewald	Instrumentation and Techniques (IT8 - Phase-related imaging techniques)	1114: Dark Rearing as a Means of Mimicking 'Physiological Hypoxia': a Rationale for Non-invasive Treatment of Retinopathy of Prematurity Dr Mark Koina	Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)	1390: A Mars-sized planet inferred from characterization of inclusions in extraterrestrial diamonds Dr Farhang Nabiei	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)	617: Advanced microstructure analysis of ordered domains in thermally aged Ni2Cr alloy with low iron content Prof Damien Jacob	Physical Sciences (PS4 - Metals and alloys)	17:30
17:35	1205: Deep subsurface, nanosecond laser induced modification of Si: phase transformation and solidification induced morphology Mr Lachlan Smillie	Physical Sciences (PS8 - Phase transformations and corrosion)	814: Considering absorption in EDS TEM tomography of nanocomposite materials Mr Tobias Krekeler	Physical Sciences (PS5 - Ceramics and inorganic composites)	1148: Atomic Scale Recognition of Structure in the Intercalation of Sodium by Aberration-Corrected Scanning Transmission Electron Microscopy Dr Xi Shen	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	996: Electron Backscatter Diffraction study of recovery and recrystallization in Oxide Dispersed Strengthened Steels Dr Ravi Chandra Gundakaram	Physical Sciences (PS4 - Metals and alloys)	17:35
17:40	652: Microstructure and properties of laser beam and gas tungsten arc welded zirconium-2.5 niobium Mr Sibusiso Mahlalela	Physical Sciences (PS8 - Phase transformations and corrosion)	285: Crystal Structures of Novel i-MAXs Phases Uncovered by STEM A/Prof Jun Lu	Physical Sciences (PS5 - Ceramics and inorganic composites)	102: Demonstrations of chemistry at a point through restructuring and catalytic activation at anchored nanoparticles Dr Billy Murdoch	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	1228: The partitioning and site occupancy of solutes in W free Co based γ - γ' superalloys: A combined TEM and 3DAPT study Mr Prafull Pandey	Physical Sciences (PS4 - Metals and alloys)	17:40
17:45	347: Three-dimensional elemental analysis of semiconducting devices by EDS Tomography Dr Yoshitaka Aoyama	Physical Sciences (PS7 - Semiconductors and materials for communication)	859: FEG-SEM and XRD Studies of Aging Time in the Hydroxiapatite Synthesis by the Sol-Gel Method using Biological Precursor Dr Jose Brant de Campos	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	1354: Visualization of 2D dopant distribution in energy selected secondary electron image by 200 kV scanning transmission electron microscope Mr Noriaki Endo	Physical Sciences (PS7 - Semiconductors and materials for communication)	296: Metallurgical Aspects of the Additive Manufacturing of Metallic Materials - Microstructure/Mechanical Properties/Heat Treatment A/Prof Matjaž Godec	Physical Sciences (PS4 - Metals and alloys)	17:45
17:50			1492: In-situ TEM heating of bimetallic Fe/Au nanoparticles Dr Darja Jenko	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)			14: Strain mapping during in-situ tensile loading using FIB-DIC Dr Ehsan Ghassemali	Physical Sciences (PS4 - Metals and alloys)	17:50
17:55							1354: Visualization of 2D dopant distribution in energy selected secondary electron image by 200 kV scanning transmission electron microscope Mr Noriaki Endo	Physical Sciences (PS7 - Semiconductors and materials for communication)	17:55

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12:45	981: Electron Tomography in the SEM via scanning-transmission imaging for biological and physical sciences Dr Maurizio Donarelli	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	1139: Nanoscale spatial organisation of the Retromer complex in Parkinson's disease Dr Neftali Flores-Rodriguez	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	1059: Atomically dispersed platinum species on cerium-based catalyst Dr Jaroslava Nováková	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	1261: Electron Tomography of Simple Solids in Aluminium Alloys Mr Zezhong Zhang	Physical Sciences (PS4 - Metals and alloys)	12:45
12:50	793: Increasing the energy loss range in EELS at 80 kV Dr Ian MacLaren	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	1311: Brains, Bugs and Biocontainment: Applying novel stem cell derived neuron models to investigate the biology of highly pathogenic viral diseases in the human brain. Dr Megan Dearnley	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	1279: Compressive properties of hollow BN nanoparticles: in-situ testing in a high-resolution transmission electron microscope Dr Konstantin Firestein	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	555: Carbide Clusters in Ti-Mo Microalloyed Steels: A HR-STEM and APT Study Dr Jiangting Wang	Physical Sciences (PS4 - Metals and alloys)	12:50
12:55	1193: EDS Mass-Thickness Measurements in the TEM: A New Approach to Quantitative Chemical Analysis of (Planetary) Materials? Prof Thomas Zega	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	1895: Visualization Three-dimensional Structure of Full-length EGFR by Cryo-electron Tomography Dr Endang R. Purba	Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)	88: Temperature dependent transition in MnAs : EMCD and electron holography in-situ studies Dr Benedicte Warot-Fonrose	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	374: Microstructure of TiAl10Si20 intermetallic alloy prepared by Spark Plasma Sintering Ms Anna Knaislová	Physical Sciences (PS4 - Metals and alloys)	12:55
13:00	1434: A method for atom probe analysis of lipid bilayers and membrane proteins Dr Gustav Sundell	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	35: Accelerated oxidative renal damage in high fat diet fed heterozygous sirtuin1 mice Dr Alessandra Stacchiotti	Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)	1408: Thermal degradation of InGaN quantum wells - in-situ TEM studies Dr Julita Smalc-Koziorowska	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	637: Influence of local chemistry in the elementary mechanisms of deformation Dr Cecile Marcelot	Physical Sciences (PS4 - Metals and alloys)	13:00
13:05	389: Correlative transmission Kikuchi diffraction and atom probe tomography analysis of grain boundaries in CuInS2 thin film solar cells Dr Torsten Schwarz	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1137: Understanding the Growth of Gallium Nitride Nanorods using Cathodoluminescence Spectroscopy Dr Mark Lockrey	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1093: In-situ observation of irradiated-induced amorphization in zirconium suboxides in nuclear fuel cladding alloys Mr Junliang Liu	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	1296: Investigation of cation migration in Gd-doped ceria Mr Zheng Ma	Physical Sciences (PS5 - Ceramics and inorganic composites)	13:05
13:10	756: Correlative Super-Resolution/AFM for Investigating Cellular Ultrastructure Modifications Mr Riley Hargreaves	Instrumentation and Techniques (IT3 - Methods and workflows for correlative microscopy)	748: Nano-in-bulk structural cathode materials for high-performance Li ion batteries Mr Young-Hoon Kim	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1180: Thermal expansion coefficient of graphene measured by electron diffraction Dr Misa Hayashida	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	331: Atomic resolution imaging of perovskite nanoparticle surfaces exposed to gas environments at elevated temperatures by transmission electron microscopy Dr Barnaby Levin	Physical Sciences (PS5 - Ceramics and inorganic composites)	13:10
13:15	232: High-resolution compact TEM for the characterization of nano-composites Dr Toshie Yaguchi	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	605: Structural and low-loss characterization of synthetic 2D-TMDs Mr AnkitNalin Mehta	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	448: Evidence for melting in glassy carbon at high pressures and temperatures. Mr Brenton Cook	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	891: Bio-inspired multilayered hybrid organic-inorganic composites investigated by (S)TEM Dr Vesna Srot	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	13:15
13:20	181: Reliability of thickness determination by position-averaged convergent beam electron diffraction Dr Scott Findlay	Instrumentation and Techniques (IT6 - Diffraction techniques)	635: The nature of interfaces in dental enamel: A FIB-STEM investigation Mrs Jasmin Koldehoff	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1161: Fabrication of Pure Amorphous Diamond by Ion Implantation and Thermal Annealing Dr Sergey Rubanov	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	306: 3D Reconstruction of Porous Polymers using FIB-SEM Miss Cecilia Fager	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	13:20
13:25	380: Low-energy electron point projection microscopy/diffraction study of suspended graphene Dr Ing-Shouh Hwang	Instrumentation and Techniques (IT6 - Diffraction techniques)	384: Strain mapping by scanning electron diffraction in hetero-nanowires based on tellurium and selenium compounds Dr Slawomir Kret	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	97: Interaction between 2D transition metal dichalcogenides and metal atoms for use in electrical contacting, investigated via atomic resolution HAADF Scanning Transition Electron Microscopy Ms Eileen Courtney	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	307: Electron tomography for revealing nanowire surface features Mr Axel Persson	Physical Sciences (PS7 - Semiconductors and materials for communication)	13:25
13:30	1338: Deep Neural Network for Iterative Image Reconstruction with Application to Fast Environmental Transmission Electron Tomography Dr Hussein Banjak	Instrumentation and Techniques (IT7 - Multi-scale 3D imaging)	127: In-situ transmission electron microscopy investigation of stress-induced reversible charged domain walls in ferroelectrics Ms Qian WeiHuang	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	41: Measuring the bacterial adhesion of a single microorganism on plastic surface with a new tailor-made system Mr Philipp Haefner	Physical Sciences (PS3 - Thin films, coatings and surfaces)	486: Cathodoluminescence study of defects in InGaN/GaN quantum wells grown on semipolar plane Prof Young-Woon Kim	Physical Sciences (PS7 - Semiconductors and materials for communication)	13:30
13:35	394: Simulated Quantum Electron Microscope Images Prof Pieter Kruit	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	931: Measurement of the magnetic induction: off-axis electron holography compared to 4D-STEM COM technique Dr Victor Boureau	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	210: Segmented ring detector analysis in simulated STEM images investigating medium-range order in amorphous materials Mr Sven Hille	Physical Sciences (PS9 - Amorphous and disordered materials, liquid crystals)			13:35
13:40	1025: Optimum imaging conditions in aberration-corrected TEM for tomography of in-situ microscopy at low voltages Dr Felix Börrnert	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1231: Single dust particle analysis to trace the origin Dr Hye Jung Chang	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)					13:40
13:45			1293: Wear mechanisms of sintered polycrystalline diamond (PCD) in machining of Ti alloys characterized by advanced microscopy and spectroscopy Dr Martina Lattemann	Physical Sciences (PS8 - Phase transformations and corrosion)					13:45

**Tuesday
11 September 2018**

	Mini Oral Theaterette 1	Theme	Mini Oral Theaterette 2	Theme	Mini Oral Theaterette 3	Theme	Mini Oral Theaterette 4	Theme	
16:15	775: Managing and Financing of the Center for Electron Microscopy (ZELMI) Dr Dirk Berger	Frontier Issues (FI3 - Facility management)	1608: Nonstandard Sample Preparation Techniques for Conventional TEM of Carbon Nanomaterials Dr Denis Korneev	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1423: Pt-Au-ZnO hybrid nanostructures: Effect of crystal structure on photocatalytic properties. Dr Joseph Fernando	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1119: In-situ TEM observation of liposomes in liquid cells using graphene sandwiched holy silicon nitride grids Dr Goshu Tamura	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	16:15
16:20	1215: Development of fountain detectors for low energy secondary electron detection in SEM Dr Toshihide Agemura	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	1452: Necessity and application of the transmission cross-coefficient for simulation of low-voltage HRTEM images Dr Zhongbo Lee	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	583: Combining in situ heating and serial block face SEM approaches to investigate the 3D thermal evolution of nanoporous gold Dr Elisa Sogne	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1555: In operando electron holography study of working nanocapacitors Mr Masseboeuf Aurélien	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	16:20
16:25	221: Exploiting the Acceleration Voltage Dependence of EMCD Dr Stefan Löffler	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	1363: Depth sectioning by 4D-scanning confocal electron microscopy technique Dr Masaki Takeguchi	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	342: Tellurides based Nanowires: Understanding Growth Mechanism and Building Complex Heterostructures Miss Dipanwita Chatterjee	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	772: Direct observation of the liquid-like superplasticity in native alumina under oxygen environment Mr Yang Yang	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	16:25
16:30	1259: Visualizing the dynamics of low-energy electron-matter interactions using in-situ fluorescence microscopy Mr Yoram Vos	Instrumentation and Techniques (IT13 - Spectroscopy – Low energy excitations and ultrafast spectroscopy)	1550: Defect analysis of 2D materials by a combination of aberration corrected scanning transmission electron microscope and machine learning Mr Francis Okello Odongo Ngome	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	629: Observing Zn-Fe Galvanic Oxidation at Nanoscale by Aberration-Corrected STEM Dr Sebastian Calderon	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	876: The in-situ mechanical and tribological properties of carbon nanosurface in TEM Dr Xue Fan	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	16:30
16:35	1463: Sample preparation of biological samples for analysis with atom probe tomography Mrs Astrid Pihl	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1146: Optimize the probability of single atom manipulation in scanning transmission electron microscope Mr Cong Su	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	490: Atomic force microscopy study of structural superlubricity and its limitations Prof Ivan Stich	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	449: Electrical, chemical and microstructural characterisation of various amorphous carbon resistive switching devices Mr Thomas Raeber	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	16:35
16:40	657: Modular UHV cryogenic protocols for environmentally-sensitive atom probe Dr Leigh Stephenson	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1346: Distinct clathrin nanostructures at the metaphase spindle are required for spindle bipolarity and integrity Dr Neftali Flores-Rodriguez	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	178: AR-TEM and STEM studies of Encapsulated PCMs in Narrow to Medium Diameter SWCNTs Miss Charlotte Slade	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	643: Atomic resolution electron microscopy and spectroscopy of ion implanted dopants in two-dimensional materials Mr Eoghan O'Connell	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	16:40
16:45	1473: Interlaboratory Study: Laser-assisted Atom Probe Tomography (APT) of a Phosphorous-Doped Silicon Specimen Dr Austin Akey	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	765: Association of axonal processes with contractile cells in salivary glands of the tick Ixodes ricinus Dr Marie Vancová	Life Sciences (LS-13 - Invertebrate Biology & Taxonomy)	889: 3D atomic-scale insights into the substantial coercivity enhancement of Sm(CoFeCuZr) ₂ permanent magnets with Cu powder doping Mr Hansheng Chen	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	72: Characterization of As-Received and In-Situ and Ex-Situ Annealed Electrodeposited Nanocrystalline Nickel Using Automated Crystal Orientation Mapping in TEM and SEM Dr Pavel Cizek	Physical Sciences (PS4 - Metals and alloys)	16:45
16:50	191: Evaluation of feature based approaches for alignment of tilt-series without fiducial markers. Miss Amandine Verguet	Instrumentation and Techniques (IT2 - Computational methods for data acquisition, analysis and visualisation)	1386: Are Biofilms behind Adenotonsillar Disease? Miss Sharon Clark	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	1556: Magnetic nanotubes: towards record mobility of magnetic domain walls Mr Masseboeuf Aurélien	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	1178: Investigation of the fatigue life of aluminium alloys processed via additive manufacturing A/Prof Gwenaëlle Proust	Physical Sciences (PS4 - Metals and alloys)	16:50
16:55	1216: Correlative synchrotron infrared spectroscopy and super-resolution fluorescence microscopy for the detection of cell damage Dr Toby Bell	Instrumentation and Techniques (IT3 - Methods and workflows for correlative microscopy)	726: New insights into thromboinflammation through confocal intravital microscopy and thrombosis models Mr Imala Alwis	Life Sciences (LS-2 - Multiplex Live Imaging of Cells, Tissues & Organisms)	498: Off-axis electron holography investigation of nano-objects' magnetic state Mr Krzysztof Morawiec	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	34: New polytypes of LPSO structures in Mg-Zn/Co-Y alloys Dr Qianqian Jin	Physical Sciences (PS4 - Metals and alloys)	16:55
17:00	1226: Detection of fluorescently labeled proteins by electron microscopy Dr Nicholas Ariotti	Instrumentation and Techniques (IT3 - Methods and workflows for correlative microscopy)	1900: Looking into the mechanism of a hetero-oligomeric class II chaperonin: Cryo-Electron Microscopy studies of the Thermosome Miss Jen Coombs	Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)	749: Controlling atomic scale epitaxial crystallization by an interfacial conductivity of the insulating oxides under an electron beam Mr Gwangyeob Lee	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	58: Mechanisms of Damage Tolerance of CrCoNi-Based High-Entropy Alloys Prof Qian Yu	Physical Sciences (PS4 - Metals and alloys)	17:00
17:05	974: Resolving semiconductor carrier dynamics at the nanoscale through photon-pump electron-probe microscopy Mr Mathijs Garming	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	1521: Surface properties of red blood cell and breast cancer cell membranes probed with the CM-AFM. Dr Olivier NOEL	Life Sciences (LS-4 - Atomic Force Microscopy in Molecular and Cell Biology)	1402: Transition-Metal-Doped Topological Insulators Dr Vlado Lazarov	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	467: Changes in microstructure and behaviour of additively manufactured AlSi10Mg alloy induced by elevated temperatures Ms Michaela Fousova	Physical Sciences (PS4 - Metals and alloys)	17:05

**Tuesday
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17:10	1295: Mapping Copper on the Surface of Gold Nanocubes Mr Weilun Li	Instrumentation and Techniques (IT6 - Diffraction techniques)	21: Unlocking the distribution of fluorescently labeled albumin in zebrafish Ms Delfine Cheng	Life Sciences (LS-5 - Cellular Transport & Dynamics)	1508: Study of crystalline and shape anisotropy competition in magnetic nanostructures by electron holography and crystal orientation mapping Prof Arturo Ponce	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	44: Electron beam induced crystallization of co-sputtered amorphous high entropy alloy nanoparticles in ionic liquid Dr Alba Garzon	Physical Sciences (PS4 - Metals and alloys)	17:10
17:15	783: Latest Developments for Advanced 3D EBSD Mr Fabián Pérez-Willard	Instrumentation and Techniques (IT6 - Diffraction techniques)	15: TB in 3D: A novel approach to quantifying tuberculosis infection in three dimensions using Mesoscopy and optical clearing techniques Dr Robert Francis	Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)	1416: Building blocks of marine calcifiers foraminifera as examples of nano to macroscale arrangements in biominerals Dr Aleksey Sadekov	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)	309: 3D characterization of precipitates in N-added austenitic stainless steel using FIB-SEM tomography Prof Kenji Kaneko	Physical Sciences (PS4 - Metals and alloys)	17:15
17:20	973: Quantitative Diffraction Methods in the Scanning Electron Microscope Mr Sam Fairman	Instrumentation and Techniques (IT6 - Diffraction techniques)	1836: Scanning Electron Microscopy as a Method to Identify Feathers of Birds from the International Traffic of Wild Animals Ms Flávia Fialho	Life Sciences (LS-9 - Applications in Correlative Microscopy of Biological Systems)	1491: Experimental Clay Mineralogy in Electron Microscopy Dr Wen-An Chiou	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)	194: Transmission electron microscopy study on the precipitation behavior of MC carbide in a V and Mo - containing high Mn steel Prof Yoon-Uk Heo	Physical Sciences (PS4 - Metals and alloys)	17:20
17:25	868: Isotropic Debye-Waller factor measurements for Cu, SrTiO ₃ and GaAs using digital electron diffraction Mr Alexander Hubert	Instrumentation and Techniques (IT6 - Diffraction techniques)	53: Atom Probe Tomography Study of Electrically Characterised Defects in Gettered High Performance Multicrystalline Silicon Mr David Tweddle	Physical Sciences (PS7 - Semiconductors and materials for communication)	1158: Operando observation of electrode reactions in a solid oxide fuel cell by an environmental high-voltage electron microscope A/Prof Takafumi Ishida	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	57: Sympathetic nucleation of GP zones of θ' precipitates in an Al-3.6Cu-0.9Li aluminium alloy Mr Tsai Fu Chung	Physical Sciences (PS4 - Metals and alloys)	17:25
17:30	1307: STEM Tilt Series for Tomography in Scanning Electron Microscope Mr Fabián Pérez-Willard	Instrumentation and Techniques (IT7 - Multi-scale 3D imaging)	951: Atomic composition of the SiC/graphene structure obtained by high-temperature sublimation process A/Prof Martial Duchamp	Physical Sciences (PS7 - Semiconductors and materials for communication)	100: Thermally and Electrochemically Promoted Cathode/Electrolyte Interfaces in Solid Oxide Fuel Cells Mr Shuai He	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	175: Complex Architectures in High-Entropy Superalloy: A Study by Using Atom Probe Dr Hung-Wei Yen	Physical Sciences (PS4 - Metals and alloys)	17:30
17:35	777: Sample Preparation Technique with Electric Nano-Shield Films for In-Situ Electron Holography of Battery Materials Dr Kazuo Yamamoto	Instrumentation and Techniques (IT8 - Phase-related imaging techniques)	1212: Confined femtosecond laser modification of Si: a new pathway to induce phase transformation Mr Lachlan Smillie	Physical Sciences (PS8 - Phase transformations and corrosion)	184: Atomic-scale characterization of electrode materials by STEM Prof Lin Gu	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	1439: Helium Bubble Behaviour in a Lattice-Damaged FCC Metal Ms Kathryn Yates	Physical Sciences (PS4 - Metals and alloys)	17:35
17:40	280: Nanostructure of multifunctional and ultra-thin FeCo/TiN (bilayer period $\lambda \approx 2.3$ nm) multilayer thin films Mr Niklas Wolff	Physical Sciences (PS3 - Thin films, coatings and surfaces)	1151: Algorithm for Parent Phase Reconstruction (PPR) from EBSD Dataset Mr Cheng-Yao Huang	Physical Sciences (PS8 - Phase transformations and corrosion)	393: Puzzling diffusion behavior in Na-doped Cu(In,Ga)Se ₂ thin films revealed by APT, STEM, SIMS, and nano-AES analysis Dr Torsten Schwarz	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	1017: Characterization of Point and Extended Defects in β -Ga ₂ O ₃ Mr Jared Johnson	Physical Sciences (PS5 - Ceramics and inorganic composites)	17:40
17:45	1145: Nanostructure and Self-Assembly in Copolymers and Copolymer Films A/Prof Kevin Jack	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	1302: Spectral and structural properties of unique low dimensional amorphous carbon structures Dr Michael Kinyanjui	Physical Sciences (PS9 - Amorphous and disordered materials, liquid crystals)	663: Direct observation of oxygen lattice distortions in charged lithium-rich layered cathodes by annular bright-field imaging in STEM Dr Emanuela Liberti	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)			17:45
17:50	1543: 3D Electrospinning for Biomedical Applications Dr Wiwat Nuansing	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)			647: Importance of co-catalyst dispersion in Pt-functionalized graphitic carbon nitrides for solar fuel generation Prof Peter Crozier	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)			17:50
17:55									17:55

	Mini Oral Theaterette 1	Theme	Mini Oral Theaterette 2	Theme	Mini Oral Theaterette 3	Theme	Mini Oral Theaterette 4	Theme	
12:45	746: Photogrammetry to create 3D images from a 2D scanning electron microscope Dr Marina Richena	Instrumentation and Techniques (IT7 - Multi-scale 3D imaging)	792: The German Network of Electron Microscopy Groups (IGEME) Dr Dirk Berger	Frontier Issues (FI3 - Facility management)	73: Tailoring of surface plasmon resonances in TiN/(Al,Sc)N superlattices for applications in energy-harvesting devices Dr Magnus Garbrecht	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	1576: Phase Precipitation in Ti-Mo-Fe Alloys Investigated by Scanning and Transmission Electron Microscopy Prof Rubens Caram	Physical Sciences (PS4 - Metals and alloys)	12:45
12:50	824: Evaluation of residual stresses by use of dual beam SEM Prof Marek Faryna	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	991: Nucleolar chromatin - a microscopy-based approach Prof Christian Schöfer	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	993: HAADF STEM imaging of new spinel-like phases in Ni-rich layered oxide Li-ion cathode materials Prof Frederic Cosandey	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	106: Influence of crystallographic orientation on the mechanical behaviors and microstructural evolution in a Mg alloy Mr Peng Gao	Physical Sciences (PS4 - Metals and alloys)	12:50
12:55	438: Mapping of atomic-site-specific oxidation states of metal atoms by EELS using STEM-moiré method. Dr Eiji Okunishi	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	907: Imaging Bacterial Colonies and Phage-bacterium Interaction at Sub-nanometer Resolution Using Helium Ion Microscopy Mr Miika Leppänen	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	919: Nanomechanics of dislocations and interfaces revisited with new dedicated in-situ TEM tensile method Prof Dominique Schryvers	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	1203: Non-destructive characterization of porosity distribution in additively-manufactured metal components Dr Sam Yang	Physical Sciences (PS4 - Metals and alloys)	12:55
13:00	471: Real-space cathodoluminescence imaging of silver nanowaveguides Dr Amelia Liu	Instrumentation and Techniques (IT13 - Spectroscopy – Low energy excitations and ultrafast spectroscopy)	1092: Life off the grid - case studies and cautionary tales from structural biology in solution Mr Lachlan Casey	Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)	764: Correlation between nanoscale mechanical strain and electron transport in individual InAs nanowires Prof Eva Olsson	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	625: The long-term ageing process of alloy 2618A Dr Christian Rockenhäuser	Physical Sciences (PS4 - Metals and alloys)	13:00
13:05	29: Computational tools for the atomic-scale analysis of quasicrystals using atom probe microscopy Dr Anna V.Ceguerra	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	215: Selective modulation of TNF receptor 2 (TNFR2) promotes renal cancer stem cell survival Dr RAFIA AL-LAMKI	Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)	935: TEM characterization of BN films grown on metallic substrates by CVD Dr Frederic Fossard	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	1127: Probing Oxygen Environments Associated with High Solute Grain Boundary Complexions in Ceria Ceramics with EELS Prof Peter Crozier	Physical Sciences (PS5 - Ceramics and inorganic composites)	13:05
13:10	933: Secondary Ion Mass Spectrometry on the Helium Ion Microscope: High Sensitivity coupled with High Lateral Resolution Dr Santhana Eswara	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1446: Hall-Petch behaviour of nanostructured lamellar Cu-Mo composites produced by high-pressure torsion Dr Julian Rosalie	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1451: Electron microscopy analysis on a few-layer graphene oxide modified with silicon. Prof J. Ysmael Verde Gómez	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	1542: Interphase-interface characterization of novel engineered bio-composite systems with Scanning Electron Microscopy Ms Claudia Echeverria	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	13:10
13:15	1310: Three-beam electron diffraction for measuring crystallographic phases Dr Yueming Guo	Instrumentation and Techniques (IT6 - Diffraction techniques)	1477: In Pursuit of Safe Water in East Africa: Bringing Together Advanced Spectroscopy and Microscopy Techniques to Solve a Longstanding Mystery Mr Daniel Mosiman	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1106: Time-of-Flight Secondary Ion Mass Spectrometry (ToF-SIMS) for Imaging Composition and Functional Properties of Surfaces A/Prof Ivan Kempson	Physical Sciences (PS3 - Thin films, coatings and surfaces)	481: Low dose, high resolution analytical transmission electron microscopy Prof Rik Drummond-Brydson	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	13:15
13:20	995: Precession Diffraction Based Strain Mapping in STEM and SEM Dr Benedikt Haas	Instrumentation and Techniques (IT6 - Diffraction techniques)	1009: Mechanistic study of formation of ultra-thin single crystalline Pt nanowire and its alloys Miss Debadarshini Samantaray	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	290: Characterization of mechanical, thermal, thermo-mechanical and chemical modified surface zones by different electron microscopic methods Ms Lisa Ehle	Physical Sciences (PS3 - Thin films, coatings and surfaces)	818: Exploring the internal structure of pyramidal quantum dots Dr Kristina Holsgrove	Physical Sciences (PS7 - Semiconductors and materials for communication)	13:20
13:25	115: TEMtilt: a tool for calculating tilt angles on a double-tilt stage Mr Niels Cauterats	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1358: Diffraction contrast suppression in Lorentz microscopy by application of fast pixelated detector imaging in STEM Dr Matus Krajnak	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	1426: Multi-scale analysis of sputtered amorphous carbon film under various deposition condition using transmission electron microscopy Mr Kuntae Kim	Physical Sciences (PS9 - Amorphous and disordered materials, liquid crystals)	924: Microstructure and Their Corroded Surface after Anodic Polarization in Potassium Hydroxide Solution Dr Sankum Nusen	Physical Sciences (PS8 - Phase transformations and corrosion)	13:25
13:30	219: AC-HRTEM vs AC-STEM for imaging of electron sensitive zeolites Dr Kaname Yoshida	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	396: Towards mapping the 3D-modulated spin texture of skyrmions in thin helimagnets Mr Sebastian Schneider	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)					13:30
13:35	1269: Using High-precision STEM Imaging to Measure Local Quantitative Atomic-resolution Strain in Supported Nanocatalysts Dr Andrew Yankovich	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	796: Structural origin of high piezoelectricity at phase boundary: nanoscale phase coexistence and gradual polarization rotation Mr Haijun Wu	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)					13:35
13:40			1497: Stable isotope labelling and imaging mass spectrometry as a tool to investigate mineral-fluid interaction Prof Matt Kilburn	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)					13:40
13:45									13:45

**Wednesday
12 September 2018**

	Mini Oral Theaterette 1	Theme	Mini Oral Theaterette 2	Theme	Mini Oral Theaterette 3	Theme	Mini Oral Theaterette 4	Theme	
16:15	1873: Engineering Innovation Throughout Life and Across Cultures - Advancing STEAM Outreach Through Indigenous Paradigms, Industry Engagement, and Microscopy Aided Design And Manufacture (MADAME) Prof Melissa Knothe Tate	Frontier Issues (F11 - Outreach)	220: Investigation of parameters that influence the performance of a hole-free phase plate and its application on a carbon nanotube sample Ms Rebecca Pretzsch	Instrumentation and Techniques (IT8 - Phase-related imaging techniques)	110: Atomic Scale Insights into Phase Coexistence in Ternary Transition Metal Chalcogenides by Cross-Sectional (S)TEM Imaging Dr Yi-Chao Zou	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	368: Hidden defects and unexpected properties of graphene - How advanced TEM contributes to materials development Prof Benjamin Butz	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	16:15
16:20	360: An aberration corrector for scanning electron microscopes using miniature electron mirrors Prof Pieter Kruit	Instrumentation and Techniques (IT1 - Instrumentation)	445: Optimizing the sampling parameter in STEM Moiré interferometry for 2D strain field characterization Mr Alexandre Pofelski	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1367: Quantitative high resolution phase contrast imaging of stoichiometric Au-Cu nanoparticles Mr Manish Kumar Singh	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	518: Linking cationic distribution and growth kinetics in δ -doped superconducting La ₂ CuO ₄ heterostructures Mr Y. Eren Suyolcu	Physical Sciences (PS3 - Thin films, coatings and surfaces)	16:20
16:25	795: Assessing the use of CMOS technology in EBSD detectors and its impact on analysis speed and precision Dr Pat Trimby	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	472: Elements of quantitative ADF imaging for crystallography; quantitative, precise and reproducible methodology Dr Koji Kimoto	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1254: Titanyl sulfate as template for preparation of 1D titania structures Dr Mariana Klementova	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	963: Helium detection by elastic scattering in EELS Dr Michael Walls	Physical Sciences (PS4 - Metals and alloys)	16:25
16:30	669: Ga ion-induced damage on FIB-prepared TEM specimens and its removal using narrow argon ion milling Mr Matthias W.Stumpf	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	646: STEM imaging of the third dimension using Laue zone scattering at atomic resolution Dr Ian MacLaren	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	89: Nanoporous platinum doped cerium oxides thin films: Ionic platinum localization and stability A/Prof Valerie Potin	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	169: Characterisation and Mechanical Properties of Stainless Steel Matrix Composites Reinforced with (Nb _x Ti _{1-x})C Particles Mr Wen Hao Kan	Physical Sciences (PS4 - Metals and alloys)	16:30
16:35	162: EELS + DFT on the study of oxygen deficient α -Bi ₂ O ₃ Miss Catalina Coll	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	1410: Real Time Acquisition and Calibration of S/TEM Probe Current Measurement Simultaneously with Any Imaging or Spectroscopic Signal Prof Judy Yang	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1367: Quantitative high resolution phase contrast imaging of stoichiometric Au-Cu nanoparticles Mr Manish Kumar Singh	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1340: Investigating the Spall and Quasi-Static Tensile Responses of Commercial Lean Duplex Stainless Steel Alloys Mr Ali Ameri	Physical Sciences (PS4 - Metals and alloys)	16:35
16:40	1083: Secondary Electron Spectroscopy for Beam-Sensitive Materials - Examples, Challenges and Outlook Miss Nicola Stehling	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	600: Equilibrium constant measurement for doxorubicin-DNA interaction in situ Miss Ying Zhou	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	1185: Local lattice strain in gold nanoparticles depending on their outer shapes Mr Kohei Aso	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	483: Dislocation structures in creep-deformed nickel-based single crystal superalloys Prof Kui Du	Physical Sciences (PS4 - Metals and alloys)	16:40
16:45	213: Energy-momentum cathodoluminescence microscopy for nanophotonics Dr Toon Coenen	Instrumentation and Techniques (IT13 - Spectroscopy – Low energy excitations and ultrafast spectroscopy)	805: Alterations of mineralized matrix in the cultured bone model caused by Pb exposure Dr Suwimon Boonrungsiman	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)	1057: Investigation of pore formation during the topotactic transformation from γ -FeOOH to γ -Fe ₂ O ₃ Miss Yulia Trushkina	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1526: Nanoscale mapping of FeAl-based alloys using nanoindentation and AFM A/Prof Vilma Bursikova	Physical Sciences (PS4 - Metals and alloys)	16:45
16:50	681: Experimental Protocols for Observation of Hydrogen Trapping in Atom Probe Tomography Dr Yi-Sheng Chen	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1839: Wide-field, super resolution microscopy using fluorescent nanodiamonds as biologically targeted quantum probes to monitor live cell dynamics under physiological conditions. Prof Dr Melissa Mather	Life Sciences (LS-11 - Innovations in Light / Laser Microscopy and Optical Nanoscopy)	733: Plasmon resonances in Magnesium nanoparticles Dr Emilie Ringe	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	626: Influence of heat treatment and creep loading on the microstructure of an Al-Cu-Li alloy Dr Christian Rockenhäuser	Physical Sciences (PS4 - Metals and alloys)	16:50
16:55	972: Elimination of focused ion beam-induced damage from atom probe specimens by small beam, low energy, argon ion milling Mr Matthias W.Stumpf	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	882: Analytical electron microscopy of calcium carbonates and calcium phosphates in crustacean calcium bodies Dr Vesna Srot	Life Sciences (LS-13 - Invertebrate Biology & Taxonomy)	1515: Characterisation of Advanced Magnetic Materials using Atomic Force Microscopy Dr Yin Yao	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	376: Atom Probe Study of Microstructural Features Affecting Mechanical Properties and Delamination Cracking of Annealed Hyper-eutectoid Steel Wires Dr MajidJafari Bahramabadi	Physical Sciences (PS4 - Metals and alloys)	16:55
17:00	1480: Implementation of Correlative TEM Information into Atom Probe Reconstruction Routines Prof Brian Gorman	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1149: Imaging of antibacterial activity of polymeric particles for drug delivery systems using scanning transmission electron microscopy Dr Chisato Takahashi	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	499: Quantitative measurements of magnetic states in patterned permalloy disks using off-axis electron holography and model-based reconstruction of magnetisation Ms Teresa WeBels	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	725: Application of Electron Channeling Contrast Image on Analysis of Dislocation Structures Induced by Indentation in Nickel Single Crystal Miss Fei Ya Huang	Physical Sciences (PS4 - Metals and alloys)	17:00
17:05	672: Statistical Hypothesis Testing of the Number of Chemical Components in Spectrum Image Data Dr Motok iShiga	Instrumentation and Techniques (IT2 - Computational methods for data acquisition, analysis and visualisation)	767: Comparative nuclear localisation of African horse sickness virus non-structural protein NS4 across all serotypes Miss Shareen Boughan	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	855: Exploring domains compatibility in polycrystalline ferroics Dr Miryam Arredondo	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	829: Comparison of Different Methods for Large Volume 3D EBSD Analysis of Dual-Phase Steel Dr Michael Hassel-Shearer	Physical Sciences (PS4 - Metals and alloys)	17:05

**Wednesday
12 September 2018**

17:10	262: Integrated AFM in SEM - Correlating Electron Micros and Associated Analysis Techniques with 3D Imaging Data Dr Andrew Jonathan Smith	Instrumentation and Techniques (IT3 - Methods and workflows for correlative microscopy)	1091: Imaging approaches to understand the effects of bisphosphonate drugs on macrophages outside the skeleton Dr Marcia Munoz	Life Sciences (LS-2 - Multiplex Live Imaging of Cells, Tissues & Organisms)	425: In situ Lorentz differential phase contrast scanning transmission electron microscopy of bilayer SrRuO ₃ /SrO ₃ films hosting the skyrmion phase Prof David McComb	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	706: Characterization of Selective Impurities Segregation in MgO Grain Boundaries using Atomic-resolution STEM-EDS Mapping Dr Mitsuhiro Saito	Physical Sciences (PS5 - Ceramics and inorganic composites)	17:10
17:15	1821: Electron Crystallography for Studying Protein Structures from Micron- and Nano-Sized 3D Crystals Dr Hongyi Xu	Instrumentation and Techniques (IT4 - Cryo-TEM techniques for biological material)	632: Electron microscopy highlights the challenges of using fluorescently-tagged proteins for cellular biology Mr Matthew Jessop	Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)	1605: Crystallization pathways in carbonate archives of climate change Miss Valentina Vanghi	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)	1142: New Line Defect in Epitaxial BaSnO ₃ Miss Hwanhui Yun	Physical Sciences (PS5 - Ceramics and inorganic composites)	17:15
17:20	1472: Operando liquid-electrochemical TEM for monitoring the charge/discharge processes in a Na-O ₂ Battery Dr Arnaud Demortiere	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	773: Pushing the envelope: Novel zebrafish models for investigating neutrophil nuclear plasticity in vivo. Miss Harriet Manley	Life Sciences (LS-7 - Embryology & Developmental Biology)	1229: Direct Observation of Atomic Ordering in PrBaCo ₂ O _{5+δ} Layered Perovskite Oxide Mr Ohhun Kwon	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	1447: Element distribution at the interface of soft and hard materials. Dr Meiken Falke	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	17:20
17:25	334: An open cell environmental transmission electron microscopy technique for in situ characterization of photocorrosion of particles in aqueous solutions. Dr Barnaby Levin	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	480: Re-engineering enzymes as dSTORM detection agents Dr Amy Davies	Life Sciences (LS-8 - Pathology and Immunocytochemistry & Biomolecular Labeling)	831: Spontaneous nanostructuring of TiNiSn half-Heusler films for thermoelectric applications: a refined STEM-EELS study Mr Robert Webster	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	639: Investigating the hierarchical structure of reverse osmosis membranes - from the micro to nanoscale Dr Catriona McGilvery	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	17:25
17:30	98: Thermal Expansion Coefficient Measurement from Electron Diffraction of Amorphous Films in a TEM Dr Misa Hayashida	Instrumentation and Techniques (IT6 - Diffraction techniques)	722: Microstructural analysis and kinetics of internal nitridation of Incoloy 800H Ms Alice Young	Physical Sciences (PS8 - Phase transformations and corrosion)	27: In situ TEM studies on RRAM device and epitaxial thin films Prof Richeng Yu	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	203: Nanobeam diffraction strain analysis of released Ge gate-all-around horizontal nano-wires: challenges and limitations Dr Paola Favia	Physical Sciences (PS7 - Semiconductors and materials for communication)	17:30
17:35	693: Application of Simultaneous Energy-Filtered High-Speed 4D STEM Diffraction Imaging and EDS to Study the Strain and Elemental Distribution at the Interface Dr Anahita Pakzad	Instrumentation and Techniques (IT6 - Diffraction techniques)	989: Microstructural Analysis of the Preferential Intergranular Oxidation Behavior of Alloy 600 in H ₂ -Steam Environment Mr Liberato Volpe	Physical Sciences (PS8 - Phase transformations and corrosion)	949: Electric field in-situ TEM of metal-insulator-metal devices Dr Leopoldo Molina-Luna	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	671: Thickness-dependent Defect Evolution in GaAs-based Low-misfit Heterostructures Mr Abhinandan Gangopadhyay	Physical Sciences (PS7 - Semiconductors and materials for communication)	17:35
17:40	1514: Structural analysis of metallic particles by electron PDF methods using an axial camera under precession electron diffraction Prof Arturo Ponce	Instrumentation and Techniques (IT6 - Diffraction techniques)	84: HRTEM study of rejuvenation in metallic glasses under cryothermal cycling Dr Iuri Ivanov	Physical Sciences (PS9 - Amorphous and disordered materials, liquid crystals)	776: In situ imaging of reversible order-disorder switching of a few Au atomic layers and field evaporation using atomic resolution TEM Dr Ludvig Knoop	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	1450: Identifying Topological Materials for Quantum Computing Applications Prof David Bell	Physical Sciences (PS7 - Semiconductors and materials for communication)	17:40
17:45					1478: Directed Radiolytic Synthesis of Nanostructured Materials using in situ Liquid Cell Microscopy Dr Raymond Unocic	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)			17:45
17:50									17:50
17:55									17:55

Thursday
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	Mini Oral Theaterette 1	Theme	Mini Oral Theaterette 2	Theme	Mini Oral Theaterette 3	Theme	Mini Oral Theaterette 4	Theme	
12:45	424: A "remote" future for electron microscopy facilities Prof David McComb	Frontier Issues (FI3 - Facility management)	1525: High-speed visualization of soft tissues using contrast-enhanced micro-computed tomography Dr Alexander Ziegler	Life Sciences (LS-13 - Invertebrate Biology & Taxonomy)	1022: Analysis and Comparison of Soil Phases in Forensic Practice Mr Marek Kotrly	Physical Sciences (PS11 - Materials in geology, mineralogy and archeology)	410: Elastic strain analysis of a three-point bending for steel sheet using by EBSD-Wilkinson method. Mr Genta Maruyama	Physical Sciences (PS4 - Metals and alloys)	12:45
12:50	179: Plan View FIB Specimen Preparation With Vacuum-Assisted ex situ Lift Out Dr Lucille Giannuzzi	Instrumentation and Techniques (IT10 - SEM, FIB, scanning probe and surface microscopy)	994: Bacteria Degrade the Specialized Basal Lamina of the Junctional Epithelium Sealing Teeth Mr Aurélien Fouillen	Life Sciences (LS-14 - Host-Pathogen Interactions, Microbiology & Virology)	565: Nano-scale origins of High Visible-light Photoactivity in ZnS/GaP Multilayer Film using High-resolution Transmission Electron Microscopy (HRTEM) Miss Pariasadat Musavigharavi	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	242: Effect of surface treatment on the microstructure and mechanical properties of a high entropy alloy Mr Md Nazmul Hasan	Physical Sciences (PS4 - Metals and alloys)	12:50
12:55	353: Large area mapping for analysis of nanoscale carbonitride precipitates within the steel matrix Ms Bianca Sala	Instrumentation and Techniques (IT12 - Spectroscopy – High energy excitations and local chemical analysis)	1564: NeuO and CDR3: fluorescent probes labeling neurons and neural stem cells from mouse subventricular zone: widefield microscopy combined with long-term live cell imaging facilitated by microfluidic perfusion and fluorescent dye reloading Dr Michael Lovelace	Life Sciences (LS-2 - Multiplex Live Imaging of Cells, Tissues & Organisms)	478: New insights into the deactivation of fluid catalytic cracking catalysts Dr Frank Krumeich	Physical Sciences (PS12 - Materials for energy production, storage and catalysis)	395: Effect of ion irradiation on austenitic stainless steel at low temperatures Mr Niels Cautaerts	Physical Sciences (PS4 - Metals and alloys)	12:55
13:00	1225: Modelling the dynamics of graphene encapsulation with application for atom probe tomography Mr Shi Qiu	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	983: Elucidating the molecular assembly of pioneering transcription factors with nucleosomes using cryo-EM Dr Alicia Michael	Life Sciences (LS-3 - 3-D Structures of Macromolecules & Supramolecular Assemblies)	50: In situ study of electron beam induced InAs nanowires dissolution in de-ionized water by liquid cell transmission electron microscopy Prof Qing Chen	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	902: Characterization of precipitates in Mg alloy QE22 using advanced imaging, diffraction and spectroscopy techniques of electron microscopy Mr Xiao Jun Zhao	Physical Sciences (PS4 - Metals and alloys)	13:00
13:05	1081: EIKOSTM: Design, Performance and Results of a Newly Designed Atom Probe Microscope Dr David Larson	Instrumentation and Techniques (IT14 – Advances in Atom Probe Tomography)	1600: Microdomains at the Group B Streptococcus surface are organized in fractal structures similar to the protein patches of eukaryotic cell (macrophage) Prof Arkady Bitler	Life Sciences (LS-4 - Atomic Force Microscopy in Molecular and Cell Biology)	1037: Atom-by-Atom Nucleation of Metal Nanocrystals from a Diatomic Seed Mr Kecheng Cao	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	274: Study of the evolution of two Al-Cu(Li) alloys during thermal ageing Mr Nicolas Bello	Physical Sciences (PS4 - Metals and alloys)	13:05
13:10	978: Electron-Beam Induced Fluorescence Superresolution in Integrated Correlative Light and Electron Microscopy Ms Aditi Srinivasa Raja	Instrumentation and Techniques (IT3 - Methods and workflows for correlative microscopy)	1893: Cryo-Electron Microscopy of cardiac thin filaments: Heart disease on a molecular level Dr Danielle Paul	Life Sciences (LS-6 - Applications of Cryo Electron Microscopy in Biology)	622: Alloying as a tool for diffusion rate control in reactive multilayers Dr Alla Sologubenko	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	862: Residual silver in dealloyed nanoporous gold: quantitative spatial distribution and influence on structure and catalytic performance Mr Christoph Mahr	Physical Sciences (PS4 - Metals and alloys)	13:10
13:15	94: Nanometre Resolution STEM-EDX Spectrum Imaging in Liquids using Engineered Graphene Cells Mr Daniel Kelly	Instrumentation and Techniques (IT5 - In-situ, environmental and time-resolved microscopies)	627: TEM/STEM characterizations of NiPt1-x nano-alloys Dr Frederic Fossard	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1499: A Novel Method of Investigating Wet Materials in EM Dr Wen-An Chiou	Physical Sciences (PS13 - Physical science applications of in-situ microscopy)	1230: TEM observation of Ni ₂ Si discontinuous precipitation on Cu-Ni-Si alloy having high strength and high electrical conductivity Miss Hwangsun Kim	Physical Sciences (PS4 - Metals and alloys)	13:15
13:20	1382: Extended opportunities for diffraction imaging in FIB/SEM systems Dr Pavel Stejskal	Instrumentation and Techniques (IT6 - Diffraction techniques)	458: Sn-doping effect on the structure of GaAs nanowires grown by MOCVD Mr Han Gao	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	742: Electrical Conductance Measurement of Graphene Nanoribbons Mr Ryo Okubo	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	528: Revealing the atomic structure of bcc {112}/<111> twin boundaries by aberration-corrected STEM Dr Gilberto Casillas	Physical Sciences (PS4 - Metals and alloys)	13:20
13:25	1105: Strategies for indexing big datasets of electron diffraction patterns for nanostructure orientation and phase mapping Prof Jian-Min Zuo	Instrumentation and Techniques (IT6 - Diffraction techniques)	806: Nanoscale insights into the synthesis of GaAs core-shell nanowires for water splitting applications via in situ heating in the transmission electron microscope Dr Matthieu Bugnet	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	543: Microscopic investigations of the growth mechanism of 2D TMD materials via a joint CVD-TEM study Mr Chuanhong Jin	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	701: Directional distribution of metal interstitials in Nb ₂ Se ₃ compound Mr Woo-Sung Jang	Physical Sciences (PS5 - Ceramics and inorganic composites)	13:25

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13:30	408: A quantitative method for measuring small residual beam tilts in high-resolution transmission electron microscopy Dr Wenquan Ming	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	87: Cesium-induced inhibition of <i>Pseudomonas aeruginosa</i> PAO 1 for Bioremediation of Wastewater Ms Go-Woon Lee	Physical Sciences (PS1 - Nanoscale, nanostructured and porous materials)	1255: Direct observation on the atomic structure of 2D oxide nanosheet and its structural degradation under electron beam Miss Haneul Choi	Physical Sciences (PS2 - Carbon-based materials and 2D structures)	1468: Characterizing Microcleanliness in Superelastic Nitinol Wires and Effects on Lifetime Performance Miss Janet Gbur	Physical Sciences (PS6 - Biomaterials, polymers and polymer-based composites)	13:30
13:35	474: Atomic resolution STEM imaging in magnetic field free condition Mr Yuji Kohno	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	633: Combined microstructural and magnetic investigation of pinning force enhancement in Nb ₃ Sn superconductors Mr Stephan Pfeiffer	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	909: Electron microscopy study of octahedral tilt/hybridization/physical properties relationships in nickelate superlattices Prof Johan Verbeeck	Physical Sciences (PS3 - Thin films, coatings and surfaces)	119: Surface segregation in "W"-type quantum well heterostructures revealed by atomic resolution STEM Mr Pirmin Kuekelhan	Physical Sciences (PS7 - Semiconductors and materials for communication)	13:35
13:40	1495: Sub-Å STEM resolution from 60-300kV Mr Eric Van Cappellen	Instrumentation and Techniques (IT9 - STEM and TEM imaging)	1050: In situ transmission electron microscopy of domain switching in ferroelectric films Dr Jonathan Peters	Physical Sciences (PS10 - Magnetic, ferroelectric and multiferroic materials)	1378: Interface effects on the epitaxial growth characteristics of brownmillerite SrFeO _{2.5} thin film grown on SrRuO ₃ and SrTiO ₃ Dr Janghyun Jo	Physical Sciences (PS3 - Thin films, coatings and surfaces)	1143: Electronic structure of BaSnO ₃ investigated by electron energy-loss spectroscopy Miss Hwanhui Yun	Physical Sciences (PS7 - Semiconductors and materials for communication)	13:40
13:45	754: Directed Differentiation of Functional Cholangiocytes from Human Mesenchymal Stem Cells Dr Haolu Wang	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)			1245: Anisotropic Evaporation of ZnO Observed by In-situ Cs-Corrected High Resolution Transmission Electron Microscopy Mr Zhen Wang	Physical Sciences (PS8 - Phase transformations and corrosion)			13:45
13:50	533: Estimation of Maturation Time for Secretory Granules in Mouse Pancreatic Islet Beta Cells by Serial Block Face Scanning Electron Microscopy Dr Richard Leapman	Life Sciences (LS-1 - Structure and Function of Cells & Organelles)							13:50