Time	Monday	Tuesday	Wednesday	Thursday	Friday
08:30-90:20		**P-01:Plenary:** Ultrafast electrons from needle tips: from attosecond physics to correlations : *Felix Lopez Hoffmann*	**P-03:Plenary:** Theory of Ultrafast Electron Emission : *Peng Zhang (USA)*	**P-05: Plenary:** Experimental Progresses on the Study of Ultrafast Electron Emission, Ultrashort e-Beam Pulse and Ultrashort Terahertz Radiation Pulse at Kilowatt: *Shaozhi Deng (CH)*	
		BREAK			
09:30-10:30		**S-01: Fundamentals 1** Some deep quantum-mechanical problems of getting atoms into field emission theory: *Richard Forbes* Extensions of the Child-Langmuir Law: *Y.Y. Lau* Tunneling times and launch velocities: *Kevin Jensen*	**S-05: Applications 1** Design and Testing of a Planar CNT Array for Space Application: *Til Reichelt (DE)* MEMS Lateral Ion Detector for Chip Scale Quadrupole Mass Spectrometer: *Piotr Szyszka (PL)* Fabrication and testing of the projection lens for miniaturized transmission electron microscope: *Michal Krysztof (PL)*	**S-08: Fundamentals 4** Consequences of the extremely low radius of SWNTs for the tunnelling barrier, field emission, field ion evaporation and electric forces: theory and experiment: *Stephen Purcell (FR)* Radiation hardness of GaN vacuum nanodiodes: *Keshab Sapkota (USA)* Thermionic Current Measurement from Free-standing Graphene *Mohammadamin Jalili (CA)*	EXCURSION departure 09:00
		BREAK			
10-45-11:45		**S-02: Sources 1** Improved brightness of hafnium carbide (100) single crystal emitter with a tip-on-tip structure: *Toshiaki Kusunoki (JP)* On-Chip Micro-Nano-Neutron Source Based on Vertical Graphene Array Field Desorption Ion Source: *Tao Wang (CH)* Si-Tip with Modulation and Extraction Gates for Precise Active Control of Stable Field Electron Emission: *Yang Chen (CH)* & Juncong She (CH)	**POSTER SESSION**	**S-09: Applications 2** Experimantal method for studying electon beams in gaseous environments using a CMOS image sensor: *Kamil Baranowski (PL)* X-ray Response of Field Emission Current from MAPbBr3: *Bin Wen (CH)*	
11:45-12:45		**LUNCH**			
12:45-13:35		**P-02: Plenary** MEMS-based Vacuum Nanoelectronic Instruments: *Tomasz Grzebyk (PL)*	**P-04: Plenary** Field Emission Cathodes made from Carbon Nanotube Fiber, Film, and Fabric: *Thiago Albuquerque De Assis* (BR)	**S-10: Fabrication 2** On-Chip GaN Vacuum Electron Devices: *George Wang (USA)* Field Emission Properties of Cold Cathodes Based on Cold-Rolled 3D Graphene: *Renato Azambuja(USA)* Electroless Copper Plating Enables Fully 3D-Printed Electron and Ion Devices: *Jan Sobków (PL)*	
		BREAK			
13:40-14:40		**S-03: Fabrication 1** Field Emission Performance of Carbon Nanostructures Grown on SiC via Catalyst-Free Vacuum Decompositio: *Marc Cahay (USA)* Diamond coating of diced si field emitters for enhanched field emission perfomance: *Aleksandra Buchta (DE)* Planar type electron emission device using graphene/p-Si Schottky junction: *Katsuhisa Murakami (JP)*	**S-06: Fundamentals 3** Quantitative simulation of the current-voltage characteristic of a subnanometer-radius field emitte: *John Xanthakis* Impact of counter-electrode curvature on the electrostatic single-tip field enhancement factor: Scaling theory and connection with experiments: *Thiago Albuquerque De Assis (BR)* Experimental Method for investigatin of the emission pattern characteristics of individual field emission tips using a CMOS image sensor: *Mathias Bartl (DE)*	**S-11: Fundamentals 5** Investigation on the low secondary electron emission mechanism of vertical graphene and its dynamic variation characteristics under electron beam bombardment: *Jialong He (CH)* Multi-Objective Optimization of Metallic Vacuum Field Effect Transistors: *Nathaniel Hernandez (USA)* Precision and Complexity in Thermionic Emission from Low-dimensional Materials *Mohammadamin Jalili (CA)*	
		BREAK			
14:45-15:45		**S-04: Fundamentals 2** 4H-Silicon Carbide Field Emitters for High Power Applications: *Salvador Barranco Cárceles (FR)* Investigation on the influence of internal voltage drops on the emission behavior of silicon field emission arrays using CMOS image sensors: *Ali Asgharzade (DE)* Simulation of Anode Engineering Geometries for Field Emitter Arrays: *Youngjin Shin (USA)*	**S-07: Sources 2** Submicrosecond Pulse Field Emission from Planar-Gate Zinc Oxide Nanowire Cold Cathode: *Qi Liu (CH)* Optimization of X-ray Energy for XRF Applications Using Dual LiTaO3 Pyroelectric Crystals: *Irshad Ebrahim (DE)* Single-Atom-Tip Field Emitters Generated on Frozen Refractory-Metal Taylor Cones: *Gregory Hirsch (USA)*	**S-12: Sources 3** Fabrication of wafer-scale on-chip thermionic electron sources with suspended Y2O3/TiN filaments: *Weidong Rao (CH)* Single-Pixel Field Emission Characteristics of Gated Zinc Oxide Nanowire Field Emitter Arrays: *Zhuoran Ou (CH)* Granularity in electron emission at the nanoscale. *Ágúst Valfells (ISL)*	
		BREAK			
16:00-17:00		**Tutorial 1** Introduction to Field Electron Emission Theory: *Richard G. Forbes (USA)*	**Tutorial 2** Fundamentals of particle-in-cell simulation *John Verbouncoeur (USA)*	**Tutorial 3** Simulating Nano- and Microscale Vacuum Electronics with Molecular Dynamics *Kristinn Torfason (IS)*	
16:30-18:00	Welcome reception - registration		**Conference dinner** **Time: 19:00 - 22:00** **Location: La Primavera, Harpa concert hall**		