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Monday, 6th July 2020

Time (Lyon)		Code, Page
14:40-15:00	Opening comments from the two Chairmen	

Session M1: Theory (4)

Time (Lyon)	Title and Authors for oral presentations **(Speaker in Bold)**	Code, Page
15:00-15:15	Correction factors for field emission from a nanoscopic emitter based on ab initio calculation of the electron eigenstates **A. Chatziafratis** and J.P. Xanthakis	M1.01 Pg. 19
15:15-15:30	Tradeoff between proximity and aspect-ratio in optimizing the field enhancement factor of large area field emitters **Thiago A. de Assis**, Fernando F. Dall'Agnol, Marc Cahay	M1.02 Pg. 21
15:30-15:45	Comparing the performance of Fowler-Nordheim plots and Murphy-Good plots **Mohammad M. Allaham**, Marwan S. Mousa, Richard G. Forbes	M1.03 Pg. 23
15:45-16:00	Relative contributions to the emission within bundles of carbon nanocone emitters **D. Mofakhami**, Ph. Dessante, Ph. Teste, R. Landfried, T. Minea, B. Seznec, J.-P. Mazellier, P.-L. Gautherin	M1.04 Pg. 25

16:00-16:15	Pause	

Session M2: Applications (3)

16:15-16:30	Application of WO3 nanowire field emitter arrays in flat-panel X-ray source **Zufang Lin**, Paibin Xie, Libing Wang, Huanjun Chen, Shaozhi Deng, Jun Chen	M2.01 No Extended
16:30-16:45	Development of Miniaturized Traveling-Wave Tubes With Planar Microstrip Slow-Wave Structures on Dielectric Substrates **N.M. Ryskin**, R.A. Torgashov, G.V. Torgashov, A.G. Rozhnev, A.V. Starodubov, A.A. Serdobintsev, A.M. Pavlov, V.V. Galushka, A.A. Burtsev, I.A. Navrotskiy, G. Ulisse, V. Krozer	M2.02 Pg. 27
16:45-17:00	Mitigating the space charge effect in a thermionic energy converter by controlling the interelectrode distance in-situ **Mohab O. Hassan**, Kenichi Takahata, Alireza Nojeh	M2.03 Pg. 29

17:00-17:15	Pause	

Session M3: Emitters (4)

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17:30-17:45	Modulation of hot electron in wide-bandgap semiconductor/2-D materials stacked structure for field electron emission **Yicong Chen**, Zhibing Li, Juncong She, Shaozhi Deng, Jun Chen	M3.02 No Extended
17:45-18:00	Effect of electrical conduction on electron emission from diamond needles, **Ivan Blum**, Mario Borz, Olivier Torresin, Julien Mauchain, Benoit Chalopin, Angela Vella	M3.03 Pg. 33
18:00-18:15	Experimental Investigation of the Energy Broadening of Thermionic Electrons, **Mike Chang**, George A. Sawatzky, Alireza Nojeh	M3.04 Pg. 35

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	First-principles evidence of a constant effective field enhancement factor for carbon nanotube field emitters Multicathode Field Emission Configurations and their Optimization Caio P. de Castro, **Thiago A. de Assis**, Roberto Rivelino, Fernando de B. Mota, Caio M.C. de Castilho, Richard G. Forbes	M4.02 Pg. 40
	Density functional calculations with lattice relaxation of field emitted currents Harilaos J. Gotsis, Rv. Naoum C. Bacalis, **John P. Xanthakis**	M4.03 Pg. 42
	The May 2019 values of the field emission universal constants, and related matters **Richard G. Forbes**	M4.04 Pg. 44
	Effect of space charge on the vacuum electron emission from a microtip **Benjamin Seznec**, Tiberiu Minea, Philippe Dessante, Philippe Teste	M4.05 Pg. 46
	Modeling basic tip forms and its field emission	M4.06

	S. V. Filippov, E.O. Popov, A.G., Kolosko, and F.F Dall'Agnol.	Pg. 48
	Physical properties of amorphous Selenium superlattice structures for future X-ray detectors **Joshua D. John**, Noritoshi Miyachi, Kunitaka Enomoto, Ken Okano, Tomoaki Masuzawa, Takatoshi Yamada, Shun Okano, Dietrich R. T. Zahn, Daniel H. C. Chua	M4.07 Pg. 50
	Atmospheric microplasma-sputtered micro and nanowires for advanced THz interconnects **Yosef Kornbluth**, Luis F. Velásquez-García, Isaac Ehrenberg, David Carter, Kasey J. Russell	M4.08 Pg. 52
	Enhanced Sensitivity of HgI2 Based X-ray Detector by Integrating Vacuum Diode **Zhipeng Zhang**, Zhaojun Zhang, Wei Zheng, Kai Wang, Huanjun Chen1, Shaozhi Deng, Feng Huang, Jun Chen	M4.09 No Extended
	Fabrication of Gated ZnO Nanowire Field Emitter Arrays for Pulsed Flat Panel X-ray Source **Chengyun Wang**, Long Zhao, Libin Wang, Xinpeng Bai, Shaozhi Deng, Juncong She, Ningsheng Xu and Jun Chen	M4.10 Pg. 54
	Cathodoluminescent Properties of polycrystalline Ga2O3 thin film and its application in UV flat panel light source **Jing Yin**, Manni Chen, Libin Wang, Xiuqing Cao, Juncong She, Shaozhi Deng, Ningsheng Xu and Jun Chen	M4.11 Pg. 56
	Fabrication of ZnO nanowire cold cathode flat panel X-ray source module for adaptive X-ray imaging **Shuai Wang**, Daokun Chen, Libin Wang, Xinpeng Bai, Guofu Zhang, Shaozhi Deng, Juncong She, Ningsheng Xu, Jun Chen	M4.12 Pg. 58

Session M4 Open Poster (Posters in Proceedings, questions can be posted to any participant.

Time (Lyon)	19:00-21:00	

Tuesday, 7th July 2020

Session T1: Fundamentals (6)

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15:15-15:30	OPAL-MITHRA: Self-consistent Software for Start-to-End Simulation of Undulator-based Facilities **Arnau Albà**, Andreas Adelmann, Arya Fallahi	T1.02 Pg. 63
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Session T2 : Vacuum Micro-Nano Devices (3)

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17:15-17:30	Individually addressable fully integrated field emission electron source fabricated by laser micromachining of silicon **Robert Lawrowski**, Matthias Hausladen and Rupert Schreiner	T2.02 Pg. 73

17:30-17:45	Silicon Field Emitters fabricated by Dicing-Saw and TMAH-Etch **Simon Edler**, Josef Biba, Walter Hansch, Michael Bachmann, Felix Düsberg, Christoph Langer, Andreas Schels, Marinus Werber, Andreas Pahlke	T2.03 Pg. 75
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	Low-temperature scanning field emission microscope with polarization analysis A.-K. Thamm, **M. Demydenko**, T. Michlmayr, D. Pescia, U. Ramsperger	T3.09 Pg. 96
	Field emission characteristics of looped carbon nanotube fibers under pulsed mode operation **J. Ludwick**, S.B. Fairchild, P.T. Murray, J. Park, M. Pasquali, M. Cahay	T3.10 No Extended
	Field emission behaviour of single-crystal Pd nanowires **Robert Lawrowski**, Shuangyi Linghu, Fuxing Gu and Rupert Schreiner	T3.11 Pg. 98
	Addressable field emitter arrays with high density patterned ZnO nanowire emitters and under-gate structure **Xuqi Wang**, Libin Wang, Xinpeng Bai, Juncong She, Shaozhi Deng, Jun Chen	T3.12 Pg. 100
	A Study of Field Electron Emission in a Nanoscale Air-Channel Silicon Diode Nikolai N. Patyukov, **Gleb D. Demin**, Nikolai A. Filippov, Nikolai A. Djuzhev, Maksim A. Makhiboroda and Vladimir A. Bespalov	T3.13 Pg. 102
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	Circuit Models of Field Emission Silicon Diode and Transistor with a Nanoscale Vacuum Channel I.D. **Evsikov**, G.D. Demin, P.Yu. Glagolev, N.A. Djuzhev, M.A. Makhiboroda, V.A. Bespalov, S.V. Filippov, A.G. Kolosko, E.O. Popov	T3.15 Pg. 106

Session T4 Open Poster (Posters in Proceedings, questions can be posted to any participant.

Time (Lyon)	18:45-20:45	

Time (Lyon)		
20:45 -??	Closing remarks	

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	Facetless electron emission source for reducing virtual source size Soichiro Matsunaga and Yasunari Sohda	EA 2 Pg. 111
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