

EASSE 2023 Program

27 March (Mon.)

27 March (Mon.)							
11:00	-	13:00	Registration				
13:00	-	13:10	Opening Remarks				
13:10	-	13:40	Key.1	Hiroyuki Ohsaki	The University of Tokyo	Superconductivity Applications in Transportation	Keynote
13:40	-	14:00	Inv.1	Charles S. Y. Yang	Chungbuk National University	Magnetic immunoassay with SQUID and magnetic marker	Invited
14:00	-	14:20	Inv.2	Kiwoong Kim	MagQu Co., Ltd.	Parahydrogen-enhanced SQUID MRI and organic reaction monitoring	Invited
14:20	-	14:40	Inv.3	Shane Andrew Cybart	UC Riverside	Nanoscale High-Transition Temperature Josephson Junctions and SQUIDS	Invited
14:40	-	14:55	Caffe Break				
14:55	-	15:15	Inv.4	Shirabe Akita	CRIEPI	Power Industry in Japan and Expectations for Superconducting Application	Invited
15:15	-	15:35	Inv.5	Shigehiro Nishijima	Fukui University of Technology	Investigation on High Gradient Magnetic Separation for Crud Material in Nuclear Reactors	Invited
15:35	-	15:55	Inv.6	Jun-ichi Shimoyama	Aoyama Gakuin University	Recent Progresses in Superconducting Joint Technologies Connecting HTS Tapes	Invited
15:55	-	16:15	Inv.7	Taketsune Nakamura	Kyoto University	Advanced Rotational Characteristics of High-Temperature Superconducting Squirrel-cage Rotor Realized by Magnetic Flux-flow Phenomenon and Its Application Research	Invited
16:15	-	16:30	Cot.1	Lieze Schindler	Yokohama National University	Moat Design and Analysis for AQFP Circuits	Regular
16:30	-	16:45	Caffe Break				
16:45	-	17:05	Inv.8	Mutsuo Hidaka	AIST	One of the Key Issues in Fabrication Process toward Large-scale Superconducting Digital Circuits	Invited
17:05	-	17:25	Inv.9	Yoshinao Mizugaki	The University of Electro-Communications	Development of SFQ Oscillator-Based Hardware Random Number Generators	Invited
17:25	-	17:45	Inv.10	Masamitsu Tanaka	Nagoya University	Demonstration of a Superconductor 8-Bit Microprocessor Based on High-Throughput Single-Flux-Quantum Logic Circuits	Invited
17:45	-	18:05	Inv.11	Yuki Yamanashi	Yokohama National University	Design of Parallel Carry Lookahead Adders Using Single Flux Quantum Clockless Logic Gates Based on Self-Clocking	Invited
18:05	-	18:20	Cot.2	Christopher Lawrence Ayala	Yokohama National University	Leveraging Energy-Efficient Superconductor Electronics for Next Generation Cryptographic Computation	Regular
18:30	-	20:00	Poster Session & Welcome reception				

28 March (Tue.)

8:00	-	8:30	Registration				
8:30	-	8:50	Inv. 12	Gil-Ho Lee	POSTECH	Engineering graphene Josephson junction for sensitive photon detector	Invited
8:50	-	9:10	Inv. 13	Ming-Jye Wang	Institute of Astronomy and Astrophysics, Academia Sinica	Development of Superconducting Nano-wire Single Photon Detector for Quantum Communication Application	Invited
9:10	-	9:30	Inv. 14	Hsiao-Mei Sherry Cho	SLAC National Accelerator Laboratory	Superconducting quantum sensors for sub-micro eV axion searches	Invited
9:30	-	9:50	Inv. 15	Takekazu Ishida	Osaka Metropolitan University	Neutron transmission imaging of room-temperature samples by a superconducting detector	Invited
9:50	-	10:05	Caffe Break				
10:05	-	10:25	Inv. 16	Naoto Sekiya	University of Yamanashi	High Power Transfer Efficiency Magnetic Resonance Wireless Power Transfer System using High Quality Factor Coil with Double-Sided REBCO Wire	Invited
10:25	-	10:45	Inv. 17	Yuji Tsuchiya	Tohoku University	Rectification of Microwave Signals using High-Temperature Superconducting Diodes	Invited
10:45	-	11:05	Inv. 18	Sam Benz	NIST	Superconductive Electronics for Quantum-based Metrology	Invited
11:05	-	11:25	Inv. 19	Chun-Lun Wang	Institute of Astronomy and Astrophysics, Academia Sinica	NbN- and NbTiN-base Kinetic Inductance Traveling-Wave Parametric Amplifiers (KITWPAs) for Quantum Information Circuits	Invited
11:25	-	11:40	Cont-3	Hayato Ito	High Energy Accelerator Research Organization	Effect of Heat Treatment on Quality Factor of Superconducting RF cavities	Regular
11:40	-	13:00	Lunch				
13:00	-	13:20	Inv. 20	Akira Fujimaki	Nagoya University	Impact of π -Junction-Based SQUIDS on Superconductor Circuits	Invited
13:20	-	13:40	Inv. 21	Koji Inoue	Kyushu University	Ultra-High-Speed, Low-Power Superconductor Computing with Architectural Optimization	Invited
13:40	-	14:00	Inv. 22	Taro Yamashita	Tohoku University	THz emission from BSCCO cross-whisker junction	Invited
14:00	-	14:20	Inv. 23	Hiroataka Terai	NICT	Recent progress in superconducting qubits with nitride superconductors	Invited
14:20	-	14:35	Cont-4	Michael Alan Johnston	Yokohama National University	Interconnection Strategies for Adiabatic Quantum Flux Parametron Circuits	Regular
14:35	-	14:55	Caffe Break				
14:55	-	15:15	Inv. 24	Enrico Silva	Università Roma Tre	Surface Impedance Measurements in Superconductors in Strong DC Magnetic Fields	Invited
15:15	-	15:35	Inv. 25	Chong Kim Ong	Xiamen University Malaysia and Lanzhou University	Exploring magnon dynamic by Brillouin light scattering and electrical detection	Invited
15:35	-	15:55	Inv. 26	Akinobu Irie	Utsunomiya university	Josephson Current Modulation in Hybrid FSF Structures Based on Intrinsic Josephson Junctions	Invited
15:55	-	16:10	Inv. 27	Neeraj Khare	Indian Insitute of Technology	Study of YBCO-NaNbO ₃ nanocomposite for enhanced flux pinning and Step junction SQUID with portable cryocooler for rock magnetism	Invited
16:10	-	16:25	Cont-5	Yoichi Higashi	AIST	Theoretical study on quasiparticle diffusion and trapping in one dimensional superconducting circuit	Regular
16:25	-	16:45	Caffe Break				
16:45	-	17:05	Inv. 28	Li-Min Wang	Department of Physics/Graduate Institute of Applied Physics, National Taiwan University, Taipei 10617, Taiwan	Grain boundary junctions of YBCO thin films on SrTiO ₃ bi-crystal substrates with a topological YBiO ₃ buffer layer	Invited
17:05	-	17:25	Inv. 29	Yen Pin Chang	Institute of Astronomy and Astrophysics, Academia Sinica	New control process of Oxygen Exposure for the fabrication of high quality Nb/Al-AIOx/Nb Josephson junctions	Invited
17:25	-	17:40	Inv. 30	Hsiao-Wen Chang	Institute of Astronomy and Astrophysics, Academia Sinica	NbN and NbTiN films on 2-inch Silicon Wafers with AlN Buffer-layer – Growth and their Structural and Superconducting Properties	Invited
19:00	-	21:00	Banquet				

29 March (Wed.)

8:00	-	8:30	Registration				
8:30	-	8:50	Inv. 31	Steven Mark Anlage	University of Maryland	Coherence and Nonlinearity of Strongly Coupled rf SQUID Metamaterials	Invited
8:50	-	9:10	Inv. 32	Teruyoshi Sasayama	Kyushu University	Application of an HTS Coil as a High-Sensitivity Magnetic Sensor for Non-Destructive Testing	Invited
9:10	-	9:30	Inv. 33	Yoshimi Hatsukade	Kindai University	Development of Nondestructive Evaluation Systems Combining ECT Probe with HTS-SQUID for Creep Life Assessment of KA-SUS304J1HTB Boiler Tubes	Invited
9:30	-	9:50	Inv. 34	Saburo Tanaka	Toyohashi University of Technology	High Tc SQUID application for Metallic Contaminant Detection in Liquid	Invited
9:50	-	10:05	Caffe Break				
10:05	-	10:25	Inv. 35	Masayoshi Tonouchi	Osaka University	Photon-Vortex Conversion Studied by Terahertz Emission Spectroscopy/Imaging	Invited
10:25	-	10:45	Inv. 36	Seiichiro Ariyoshi	Toyohashi University of Technology	High-temperature Superconducting Probe for Scanning Probe Microscopy	Invited
10:45	-	11:05	Inv. 37	Akira Kawakami	NICT	Mid-infrared Photon Detection by Hot Electron Bolometer	Invited
11:05	-	11:25	Inv. 38	Yoshihiko Takano	NIMS	THz emission from BSCCO cross-whisker junction	Invited
11:25	-	11:45	Inv. 39	Chiko Otani	RIKEN	Thin-Film Superconducting Microwave Resonator with High Quality Factor	Invited
11:45	-	11:55	Closing Remarks				
12:00	-		Lunch & Technical tour				

Poster presentaion

18:30-20:00 27 March	P.1	Faiz Dhiyauddin Bin Ahamad Zawati	Toyohashi University of Technology	A Study of Phase Detection Method for Inspection of Metallic Foreign Matter	Invited
	P.2	Han Sheng Huang	National Taiwan Normal University	Construction and characteristics study of high-Tc SQUID based biomagnetic particle imaging system	Invited
	P.3	Kei Yamashita	Okayama university	Aggregation of magnetic nanoparticles in biological samples evaluated by HTS-SQUID magnetic immunoassay system	Invited
	P.4	Masayuki Higashi	Nagoya University	Analysis of the giant inductance effect in single π -junction-SQUIDs	Invited
	P.5	Steven Mark Anlage	University of Maryland	Coherence and Nonlinearity of Strongly Coupled rf SQUID Metamaterials	Invited
	P.6	Takanori Fujita	University of Yamanashi	Improvement of Design Precision on NMR Sample Coil with High-Temperature Superconductor Using 3D Simulator	Invited
	P.7	Wataru Komiya	Yokohama National University	Demonstration of High-Speed Operation of a Majority-Booster Gate in Adiabatic Quantum-Flux-Parametron Circuits	Invited
	P.8	Wenhui Luo	Yokohama National University	Demonstration of a Superconducting Stochastic Memory for Stochastic Computing Systems	Invited
	P.9	Hatsuki Koyama	Yamagata University	Investigation of fabrication process for two-step MKID using niobium nitride film	
	P.10	Hongxiang Shen	Yokohama National University	High-speed Josephson-CMOS interface circuits applied in the hybrid memory	
	P.11	Rekka Moriya	Okayama university	Development of a highly sensitive evaluation system for AC magnetization characteristics of magnetic nanoparticles using HTS-SQUID	
	P.12	Rikuo Yamanaka	Yokohama National University	Design of a Bayesian Network Using a Superconducting Random Number Generator	
	P.13	Ryosuke shimada	AIST	Toward the realization of an on-chip photon-number-resolving detector with high detection efficiency	
	P.14	Seigo Ito	Yokohama National University	Parameter Optimization for Stable Operation of Boltzmann Machines by Superconducting Circuits	
	P.15	Seiya Hayashi	The University of Electro-Communications	Voltage-Swing Improvement of Double- SQUID Amplifier by Tuning McCumber Parameter	
	P.16	Shu Sasaki	Yokohama National University	Design of a variable output amplitude microwave generator using ERSFQ circuits for qubits control	
	P.17	Taiki Yamamoto	Okayama university	Dispersion method of magnetic nanoparticles by femtosecond laser pulses for quantitative magnetic immune assay using HTS-SQUID	
	P.18	Takuya Suzuki	Yokohama National University	Design of an SFQ Regular Expression Supported Pattern Matching Circuit for a Network Intrusion Detection System	
	P.19	Toranosuke Nakayama	Nagoya University	Design of Half Flux Quantum Circuits with Controllability in Energy Efficiency	
	P.20	Xin Long Wang	Yamagata University	Research on wireless power transmission using 24 GHz patch antennas	
	P.21	Yuki Tottori	Toyohashi University of Technology	Fabrication of HTS SQUID with Nanobridge Josephson Junctions	
	P.22	Zeyu Han	Yokohama National University	Design of Pooling Layer for Binarized Neural Networks Using Single-Flux-Quantum Circuit	
	P.23	Zongyuan Li	Yokohama National University	Design of a Pipeline Multiply-Accumulator with a High-Throughput Accumulator Using Single Flux Quantum Circuit	