

16 July 2017 - 17 July 2017

16 July 2017

17:00	19:00	120	Registration and Welcome Reception		
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8:00	8:55	55		Registration		
8:55	9:00	5		Opening		
9:00	9:05	5		Welcome address		Mayer of Kurume Kurume City
I Keynote talks						
9:05	9:45	40	K	Low Temperature Detectors for Dark matter and Neutrinos 30 Years ago the Start of a new experimental Technology	Franz von Feilitzsch	Technical University Munich
9:45	10:25	40	K	X-Ray Microcalorimeters in Space - Today and Tomorrow	Richard L Kelley	NASA/GSFC
10:25	11:05	40	K	CMB B-mode polarization - Probe the era before the Big Bang	Hitoshi Murayama	Kavli IPMU, University of Tokyo
11:05	11:35	30		Tea break		
2 MKIDS I						
11:35	12:05	30	I	Performance of a 961 pixel Kinetic Inductance Detector system for future space borne observatories	Jochem Baselmans	SRON
12:05	12:25	20	A	The sub-gap KID (SKID): on-chip spectroscopy at centimetric wavelengths	Alessandro Monfardini	Institut Neel - CNRS
12:25	12:45	20	A	Moving optical MKIDs to lower temperature: preliminary characterization of Hafnium resonators	Giulia Collura	University of California Santa Barbara
12:45	13:00	15	B	Suppression of in-detector-chip stray radiation for large arrays of lens-antenna coupled microwave kinetic inductance detectors	Stephen Yates	SRON
13:00	14:00	60		Lunch at the restaurant ARK		
3 MKIDS 2						
14:00	14:20	20	A	Counting Near Infrared Photons with Microwave Kinetic Inductance Detectors	Lianfu Wei	Southwest Jiaotong University
14:20	14:40	20	A	Characterizing millimeter wave Thermal Kinetic Inductance Detectors with a novel readout system	Roger O'Brient	NASA JPL/ California Institute of Technology
14:40	14:55	15	B	Photon Counting Kinetic Inductance Detectors for THz/Submillimeter Space Spectroscopy	Omid Noroozian	NRAO, UVA, NASA/GSFC
14:55	15:15	20	A	Low-Loss, Low-Noise, Crystalline Silicon Dielectric for Superconducting Microstriplines and Kinetic Inductance Detector Capacitors	Fabien Defrance	California Institute of Technology

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15:15	15:30	15	B	Kalliope-based High-Speed Neutron imager by a delay-line current biased kinetic inductance detector	Hiroaki Shishido	Osaka Prefecture University
15:30	17:00	90		Poster and coffee		
4	Application - Astronomy					
17:00	17:20	20	A	First light of DARKNESS: a pathfinder for exoplanet imaging with Microwave Kinetic Inductance Detectors	Seth R. Meeker	University of California Santa Barbara
17:20	17:35	15	B	Development of 'DESHIMA on ASTE': towards a field test of a submillimeter wave superconducting on-chip filterbank spectrometer based on kinetic inductance	Akira Endo	Delft University of Technology
17:35	17:50	15	B	The NIKA2 instrument at 30-m IRAM telescope: performance and results	Andrea Catalano	CNRS
17:50	18:05	15	B	Sensitivity, Dynamic Range, and Multiplexing Requirements of FIR Detectors for the Origins Space Telescope (OST)	Johannes Staguhn	Johns Hopkins University & NASA/GSFC
18:05	18:20	15	B	The Athena X-ray Integral Field Unit (X-IFU)	Francois Pajot	IRAP, CNRS, Universite Paul Sabatier
18:20	18:35	15	B	Design and status of TIME, a mm-wavelength spectrometer array for [CII] intensity mapping	Jonathon Hunacek	California Institute of Technology

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5	MKIDS 3					
8:30	8:45	15	B	Modelling the Performance of Single-Photon Counting Kinetic Inductance Detectors	Josie Dzifa Akua Parrianen	Cardiff University
8:45	9:00	15	B	Ultrasensitive kilo-pixel imaging array of photon noise limited Kinetic Inductance Detectors over an octave of bandwidth for THz astronomy	Juan Bueno	SRON
9:00	9:15	15	B	Development of Multi-Chroic MKIDs for Next-Generation CMB Polarization Studies	Bradley Johnson	Columbia University
9:15	9:30	15	B	Millimeter-Wave Polarimeters Using Kinetic Inductance Detectors for TolTEC and Beyond	Jason Edward Austermann	NIST
6	TES I					
9:30	9:50	20	A	Quantitatively characterizing sources of energy resolution degradation in TES microcalorimeters AC-biased at MHz frequencies.	Christine Goodwin Pappas	NIST
9:50	10:10	20	A	Josephson effects in frequency domain multiplexed TES microcalorimeters and bolometers	Luciano Gobbiotti	SRON
10:10	10:30	20	A	Development of TES microcalorimeters for 10-50 keV using a gold absorber	Haruka Muramatsu	ISAS, JAXA
10:30	11:00	30		Tea break		
7	TES 2 / Bolometer					
11:00	11:15	15	B	Noise equivalent power and energy resolution of transition-edge sensors with complex thermal models	Ilari Maasita	University of Jyvaskyla

11:15	11:30	15	B	Exploring the effects of size and geometry of normal metal features on the transition shapes and performance of transition-edge sensor microcalorimeters	Nicholas Wakeham	NASA/GSFC
11:30	11:45	15	B	Dependence of transition width on current and critical current in transition-edge sensors	Kelsey M. Morgan	NIST
11:45	12:00	15	B	Characterization of Mid-Frequency Arrays for Advanced ACTPol	Steve Choi	Princeton University
12:00	12:15	15	B	Characterization of Si-membrane TES bolometer arrays for the HIRMES instrument	Emily Margaret Barrentine	NASA/GSFC
12:15	12:30	15	B	Characterization of optical transition-edge sensors	Kori Hattori	National Metrology Institute of Japan
12:30	12:45	15	B	Eliminating anomalous low energy tails in hard X-ray TES microcalorimeters using electroplated bismuth	Daikan Yan	Northwestern University
12:45	13:00	15	B	A Static and Dynamic Physical Model for Deposition of Energy via Cosmic Rays into Sub-Kelvin Bolometric Detectors	Stever	Institut d'Astrophysique Spatiale / CNRS
13:00	14:00	60		Lunch at the restaurant ARK		
8	Application - Dark matter, neutrino and related physics 1					
14:00	14:30	30	I	New-generation cryogenic detectors for dark matter and coherent neutrino scattering	Raymond Strauss	Max-Planck-Institut for Physics
14:30	14:45	15	B	Using defect creation to discriminate dark matter signal in phonon-mediated detectors	Fedja Kadribasic	A&M University
14:45	15:05	20	A	The CUORE and CUORE 0 experiments at LNGS: detector performance and physics results	Antonio D'Addabbo	Univ. of Milano Bicocca
15:05	15:20	15	B	Status and Prospects of the EDELWEISS-III Direct WIMP Search Experiment	Alexandre Juillard	Institut de Physique Nucléaire de Lyon
15:20	15:35	15	B	XMASS; A Dark Matter Search Experiment with Liquid Xenon	Hiroyuki Sekiya	ICRR, University of Tokyo
15:35	16:50	75		Poster and Coffee		
9	Application - Dark matter, neutrino and related physics 2					
16:50	17:20	30	I	Low temperature detectors for neutrinoless double beta decay experiments	Yong-Ham Kim	Institute for Basic Science
17:20	17:40	20	A	Search for hidden photon cold dark matter using radio telescopes	Shugo Oguri	RIKEN
17:40	18:00	20	A	Enhanced Calorimetry Using Helium Evaporation and Field Ionization	George Seidel	Brown University
18:00	18:15	15	B	Status of the HOLMES experiment to directly measure the electron neutrino mass	Angelo Enrico Nucciotti	Universita di Milano-Bicocca / INFN Sezione di Milano-Bicocca
18:15	18:30	15	B	The Electron Capture in ^{163}Ho experiment	Clemens Hassel	Heidelberg University
18:30	20:00	90		Poster and Sake (rise wine)		

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10 SSPD and related detectors							
8:30	9:00	30	I	A distributed superconducting nanowire single photon detector for imaging	Qing-Yuen Zhao	Massachusetts Institute of Technology	
9:00	9:15	15	B	Four-Lead Superconducting Detector Developed for Neutron Radiography	Takekazu Ishida	Osaka Prefecture University	
9:15	9:35	20	A	Electrothermal modeling of amorphous WSi nanowires	Jason Paul Allmaras	California Institute of Technology	
9:35	9:50	15	B	High efficiency and low dark-count-rate superconducting nanowire single-photon detectors	Lixing You	SIMIT, CAS,	
9:50	10:05	15	B	Electron-phonon relaxation time in ultrathin tungsten silicon film	Alexander Kozorezov	Lancaster University	
10:05	10:35	30	I	Single microwave-photon detector based on superconducting quantum circuits	Kunihiro Inomata	AIST	
10:35	11:05	30		Tea break			
11 Other low-temperature detectors							
11:05	11:35	30	I	Physics and Applications of Metallic Magnetic Calorimeters	Sebastian Kempf	Heidelberg University	
11:35	11:55	20	A	Single Photon Detection of 1.5THz Radiation with the Quantum Capacitance Detector	Pierre Echternach	NASA JPL	
11:55	12:10	15	B	Development of STJ with FD-SOI cryogenic amplifier as a far-infrared single photon detector for COBAND experiment	Yuji Takeuchi	University of Tsukuba	
				Lunch and/or excursion			

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12 Readout Techniques & Signal processing I							
8:30	9:00	30	I	Progress in microwave SQUID readout for calorimetric and bolometric sensors	Ben Mates	University of Colorado / NIST	
9:00	9:20	20	A	A large-scale demonstration of microwave SQUID multiplexing: the SLEDGEHAMMER TES gamma-ray microcalorimeter instrument	Becker	NIST	
9:20	9:35	15	B	Microwave SQUID Multiplexing for TES micro-Calorimeters in the High-Speed Limit	James P. Hays-Wehle	NIST	
9:35	9:50	15	B	Optimized Readout Electronics for Microwave SQUID Multiplexed MMC Arrays	Oliver Sander	Karlsruhe Institute of Technology	
9:50	10:10	20	A	64 pixel metallic magnetic calorimeter based detector array with integrated microwave SQUID multiplexer	Mathias Wegner	Kirchhoff-Institute for Physics	
10:10	10:30	20	A	Advanced Time- and Code-Division Multiplexers for X-Ray Spectrometer Arrays	Irwin	Stanford University	
10:30	11:00	30		Tea break			

13	Readout Techniques & Signal processing 2							
11:00	11:20	20	A	SiGe Integrated Circuit Developments for SQUID/TES Readout			Damien Prele	APC CNRS/Univ. Paris Diderot
11:20	11:35	15	B	Frequency domain multiplexed readout of TES X-ray microcalorimeters for X-IFU on board of Athena			HIROKI Akamatsu	SRON
11:35	11:50	15	B	Traveling-wave, lumped-element kinetic inductance parametric amplifier for detector readout			Saptarshi Chaudhuri	Stanford University
11:50	12:05	15	B	Lithographed superconducting resonator development for next generation frequency multiplexing readout of transition-edge sensors			Farzad Faramarzi	University of California Berkeley
14	Fabrication & Implementation Techniques I							
12:05	12:25	20	A	Design and Fabrication of Large-Area Transition Edge Sensor Detector Arrays for Cosmic Microwave Background Polarimetry			Shannon M. Duff	NIST
12:25	12:45	20	A	Superconducting Ti/TiN thin films for mm wave absorption			Abdelkader Aliane	CEA tech LETI,
12:45	13:00	15	B	Parallel plate resonators for kinetic inductance detectors			Gregoire Coiffard	University of California Santa Barbara
13:00	14:00	60		Lunch at the restaurant ARK				
15	Application - CMB I							
14:00	14:30	30	I	Low Temperature Detectors For Cosmic Microwave Background Research			Johannes Hubmayr	NIST
14:30	14:50	20	A	The Advanced ACTPol 27/39 GHz Array			Sara Simon	University of Michigan
14:50	15:05	15	B	BICEP3 performance overview and design for BICEP Array			Howard Hui	California Institute of Technology
15:05	15:20	15	B	SPT3G: A Multichroic Receiver for the South Pole Telescope			Adam Jonathan Anderson	Fermi National Accelerator Laboratory
15:20	15:35	15	B	GroundBIRD - observation of CMB polarization with a high-speed scanning and MKIDs			Taketo Nagasaki	IPNS, KEK
15:35	17:05	90		Poster and Coffee				
16	Application - CMB 2							
17:05	17:20	15	B	Design, construction, and characterization of the 280 GHz focal plane units for the second flight of the \textsc{Spider} polarimeter			Amanda Stevie Bergman	Princeton University
17:20	17:40	20	A	The LiteBIRD Space Mission - Sub-Kelvin Instrument			Aritoki Suzuki	University of California, Berkeley
17:40	18:00	20	A	Measuring Reionization, Neutrino Mass, and Cosmic Inflation with BFORE			Sean Alan Bryan	Arizona State University
18:00	18:45	45	A	Move to the banquet place, Suiko-en				
18:45	21:00	135	A	Banquet at Suiko-en				

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17	Fabrication & Implementation Techniques 2							
8:30	9:00	30	I	Progress of Superconducting Electronics in Clean Room for Analog and Digital Superconductivity: CRAVITY			Masahiro Ukibe	AIST
9:00	9:20	20	A	LC filters for FDM readout of the X-IFU TES calorimeter instrument on Athena			Marcel P. Bruijn	SRON
9:20	9:35	15	B	The DARKNESS Array: A 10,000 Pixel PtSi MKID Array			Paul Szypryt	University of California, Santa Barbara
9:35	9:50	15	B	Magnetic Calorimeter Arrays with High Sensor Inductance and Dense Wiring			Thomas R. Stevenson	NASA/GSFC
18	Cryogenics and Components 1							
9:50	10:20	30	I	CUORE, a large cryogenic system for LTDs			Carlo Bucci	INFN - LNGS
10:20	10:35	15	B	A continuous 100-mK helium-light cooling system for MUSCAT on the LMT			Tom L R Brien	Cardiff University
10:35	11:05	30		Tea break				
19	Cryogenics and Components 2							
11:05	11:20	15	B	Vibration measurement and mitigation for cryogen-free dilution refrigerators			Chang Lee	Institute of Basic Science
11:20	11:40	20	A	Electromagnetic Design of a Magnetically-Coupled Spatial Power Combiner			Berhanu T. Bulcha	NASA/GSFC
11:40	11:55	15	B	A temperature dependent x-ray absorption characterization of test filters for the ATHENA mission X-IFU instrument			Luisa Sciortino	Universita degli Studi di Palermo
20	Application - Material analysis and others 1							
11:55	12:25	30	I	Analytical Transmission Electron Microscope using a Transition Edge Sensor for X-ray Microanalysis			Toru Hara	NIMS
12:25	12:45	20	A	Ultrafast X-ray Spectroscopies using TES Microcalorimeter Sensors: Recent Table-top Demonstrations and Current Work			Joel N. Ullom	NIST
12:45	13:00	15	B	An ultra-sensitive probe of local electronic structures using transition-edge sensor X-ray microcalorimeters at the Stanford Synchrotron Radiation Lightsource			Sang Jun Lee	SLAC National Accelerator Laboratory
13:00	14:00	60		Lunch at the restaurant ARK				
21	Application - Material analysis and others 2							
14:00	14:20	20	A	A Search for the Decay of Metastable Th-229m with Superconducting Tunnel Junctions			Stephan Friedrich	Lawrence Livermore National Laboratory
14:20	14:35	15	B	TES application to kaonic atom X-ray spectroscopy in a charged-particle beamline			Tadashi Hashimoto	Japan Atomic Energy Agency
14:35	14:50	15	B	Calorimetry of Heavy Charged Particle by superconducting transition edge sensor			Masashi Ohno	The University of Tokyo
14:50	15:05	15	B	A few photon spectral imaging with photon microscope based on optical transition edge sensor			Daiji Fukuda	NMIJ/AIST

15:05	15:20	15	B	2d MMC arrays for high resolution x-ray spectroscopy	Andreas Fleischmann	Heidelberg University
22	Closing					
15:20	15:50	30		Closing	C. Enss & LOC	
				Adjourn		