



	Monday	Tuesday	Wednesday	Thursday	Friday
07:30-08:30	Registration				
08:30-10:30	Tutorial : K.Irwin	KIDs	Calorimeters, bolometers & MMC	mm&submm astronomy	Dark matter
11:00-12:30	Tutorial : Ch.Enss		Readout Fabrication mm devices Applications		Neutrinos & rare events
	LUNCH				
13:30-15:30	TES	Readout electronics & signal processing	Visiting activities	X-Ray, VIS	Particle physics
16:00-17:30	Tunnel junction, nanowires & novel devices			Material analysis & lifescience	Closure
18:00-19:30	SPOTS	SPOTS		Gala	
		Social event			

MONDAY	7:30-20:00
TUESDAY	8:00-21:00
WEDNESDAY	8:00-16:00
THURSDAY	8:00-19:00
FRIDAY	8:00-16:00

<b>Sensor physics</b>	
1.1	Transition Edge Sensors
1.2	Kinetic inductance detectors & resonators
1.3	Tunnel junction & nanowires
1.4	Other & Novel devices
<b>Detection Techniques &amp; Readout</b>	
2.1	Microcalorimeters, bolometers, pair-breaking detectors
2.2	Macrobolometers
2.3	Magnetic calorimeters
2.4	Readout electronics & signal processing I
<b>Special poster session</b>	
3.1	Readout electronics & signal processing II
3.2	mm-wave devices at low temperature
3.3	Cryogenics for LTDs
3.4	Fabrication techniques
3.5	Applications & Outreach
<b>Applications</b>	
4.1	X-Rays, Visible, NIR & Gamma applications
4.2	mm&submm astronomy
4.3	Material analysis and life science
4.4	Dark matter, neutrinos and rare event search
4.5	Particles and nuclear physics

# MONDAY 20

7 :30	<b>Registration</b>	
8 :30	<b>Welcome</b>	
8 :45 - 10 :30	<b>Tutorial : Introduction to LTD</b>	K.Irwin
Break		
11 :00-12 :30	<b>Tutorial : Low Temperature Physics</b>	Ch.Enss

## SESSION 1

**13:30 – 18:00**

	<b>Sensor physics : Transition Edge Sensors (T1.1)</b>	
20	TES calorimeters and their optimization for a variety of measurements	<u>Bandler Simon</u>
15	Exploring the superconducting transition in transition-edge sensors and the consequences for both ac and dc bias	Bennett Douglas
15	Josephson effects in ac biased Transition Edge Sensors	Gottardi Luciano
15	AlMn Transition Edge Sensors for Advanced ACTPol	Li Dale
15	Optimization of Microcalorimeters without Linearity Constraints	Moseley Harvey
15	Development of a Microwave SQUID Multiplexed TES Array for MUSTANG2	Stanchfield Sara
15	Development of ultra low noise TES Bolometer Arrays	Suzuki T.
15	Quasiparticle Diffusion in CRESST Light Detectors	Wuestrich Marc
15	Design and performance of a TES X-ray microcalorimeter array for energy dispersive spectroscopy on scanning transmission electron microscope	Muramatsu Haruka
Break		
	<b>Sensor physics : Tunnel junction &amp; nanowires (T1.3)</b>	
15	Measuring the local sensitivity of a superconducting nanowire using a scanning current injector	Driessen Eduard
15	Dynamics of hotspots in superconducting nanowires	Kozorezov Alexander
15	Role of the Andreev current in bolometers and calorimeters based on tunnel junctions	Faivre Timothé
15	Thermal avalanche in superconducting nanowire single photon detectors fabricated from WSi/Si multilayers	Verma Varun
15	Measuring the local response of a superconducting single-photon detector	Wang Qiang

## SPOTS POSTERS

**18:30-19:10**

	<b>T1.1</b>	
5	Thermal Conductance Engineering for High-Speed TES Microcalorimeters	Hays-Wehle James
5	Modeling Reversible and Irreversible Behavior in Superconducting Transition-Edge Sensors	Sadleir John
	<b>T1.3</b>	
5	The magnetic field response of nanowire superconducting single-photon detectors	Renema Jelmer
5	Measuring Hotspot Size in SNSPDs	Stevens Martin
5	Development of superconducting tunnel junction array detectors with three-dimensional structure to exceed 1000-pixel array	Fujii Go
5	Development of superconducting tunnel junction X-ray detector with high absorption yields utilizing silicon pixel absorber	Shiki Shigetomo
5	X-ray detection performance of superconducting tunnel junctions with new layer structure	ukibe masahiro
5	A 64-pixel WSi superconducting nanowire camera for real-time single-photon imaging	Verma Varun

# Tuesday 21

## SESSION 2 8:30 – 12:30

<b>Sensor physics : Kinetic Inductance Detectors &amp; Resonators (T1.2)</b>		
20	KIDS physics overview	<b>Mazin Ben</b>
15	Multiplexed readout for 4000-pixel arrays of microwave kinetic inductance detectors	Baselmans Jochem
15	Anomalous optical response of titanium nitride resonators	Bueno J.
15	The quasiparticle generation efficiency in a superconductor measured over a broad frequency band	de Visser Pieter
15	Feedhorn-coupled TiN Kinetic Inductance Detectors for the BLAST-TNG Submillimeter Polarimeter	Dober Bradley
15	Developments in Ultraviolet, Optical, and Near-IR Microwave Kinetic Inductance Detectors	Mazin Ben
15	Horn-Coupled LEKIDs for Millimeter Wavelengths	McCarrick Heather
Break		
15	First Results from Thermal Kinetic Inductance Detectors: Highly Multiplexible Bolometric MKIDs for X-ray Spectroscopy	Ulbricht Gerhard
15	A frequency and sensitivity tunable microresonator array for high-speed quantum processor readout	Whittaker Jed
15	Observation and control of stray light coupling inside lens-antenna coupled microwave kinetic inductance detector arrays	Yates Stephen
10	WSPEC: A waveguide filter-bank focal plane array spectrometer for millimeter wave astronomy and cosmology	Bryan Sean
10	Phonon-mediated KIDs as light detectors for rare event search: the CALDER project	Cruciani Angelo
10	Towards Background-Limited Kinetic Inductance Detectors for a Cryogenic Far-Infrared Space Telescope	Glenn Jason

## SESSION 3 13:30-17:30

<b>Sensor physics : Other &amp; Novel devices (T1.4)</b>		
15	Novel techniques for phononic thermal conduction engineering: from phononic crystals to radial Casimir-limit	Maasilta Ilari
15	Improved Efficiency in Quantum Capacitance Detectors with Capacitively Coupled Absorbers	Pepper Brian
<b>Detection techniques &amp; Readout : Readout Electronics &amp; signal processing I (T2.4)</b>		
15	The development of frequency domain multiplexing readout of TES-based X-ray microcalorimeters for Athena	AKAMATSU HIROKI
15	Time-division and code-division SQUID multiplexers for TES microcalorimeter arrays: the analog readout chain	Doriese W. Bertrand (Randy)
15	Development of readout electronics for POLARBEAR-2 Cosmic Microwave Background experiment	Hattori Kaori
15	dc-SQUIDs and SQUID based multiplexers for the readout of metallic magnetic calorimeters	Kempf Sebastian
15	Kinetic Inductance Parametric Up-Converter	Kher Aditya
Break		
15	Modern microwave SQUID multiplexers with scalable readout	Mates John (Ben)
15	The yTron: A nanoscale superconducting 3-terminal device for inline readout of superconducting currents	McCaughan Adam
15	Superconducting Parametric Amplifiers for 100-300GHz applications	OBrient Roger
15	A 1:128 multiplexing rate Time Domain SQUID Multiplexer	Prêle Damien
15	Scaling Up the Readout for Ultraviolet, Optical, and Near-IR Microwave Kinetic Inductance Detectors to 10 Kilopixels	Strader Matthew J.
15	Readout of a 160 pixel FDM system for SAFARI TES arrays	Hijmering Richard
15	HEMTs for deep cryogenic high-impedance and low-frequency readout electronics	Jin Yong

**SPOTS POSTERS****18:00 – 19:00**

	<b>T1.2</b>	
5	Development of microwave superconducting microresonators for neutrino mass measurement in the HOLMES framework	Giachero Andrea
5	Inductor Noise Study in Kinetic Inductance Detectors Made of TiN	Wang Yiwen
	<b>T1.4</b>	
5	Detecting Pulsed Neutrons by using Current-Biased Kinetic Inductance Detector and 10B convertor	Ishida Takekazu
5	First measurement of an infrared dielectric bolometer with microwave readout and possible extension to a large-scale format X-ray microcalorimeter	Kikuchi Takahiro
5	Optical response of strained and unstrained silicon cold electron bolometers	Mauskopf Philip

# Wednesday 22

## SESSION 4 8:15 – 10:45

20	MMC	Fleischmann Andreas
15	Direct Detection of Pu-242 with a Metallic Magnetic Calorimeter Gamma-Ray Detector <b>Detection Techniques &amp; Readout : Microcalorimeters, bolometers, pair breaking detectors (T2.1)</b>	Friedrich Stephan
20	Nanocomposite Absorbers, Energy Conversion, and Nuclear Decay Energy Spectroscopy in Microcalorimeters	Croce Mark
15	Performance of Transition-edge sensor X-ray micro-calorimeters optimized for energies below 2 keV	Lee S.-J.
15	A metallic magnetic calorimeter for measuring atomic fundamental parameters by X-ray spectrometry	Rodrigues Matias
15	Imaging Charge transport in Ge and Si Crystals <b>Detection Techniques &amp; Readout : Macrocalorimeters (T2.2)</b>	Moffatt Robert
15	Voltage-assisted calorimetric detection of gamma interactions in cryogenic coplanar grid germanium detectors for dark matter search	Broniatowski Alexandre
15	A Radio For Hidden Photon Dark Matter	Chaudhuri Saptarshi
15	A large area light detector for scintillators in Rare Event Searches developed in the LUMINEU context <b>Detection Techniques &amp; Readout : Magnetic Calorimeters (T2.3)</b>	Gray David
Break		

## SPOTS SPECIAL POSTER SESSION 1: FABRICATION TECHNIQUES (MAIN AUDITORIUM) (T3.4)

5	Uniform non-stoichiometric titanium nitride thin films for improved kinetic inductance detector array	Coiffard Grégoire
5	Optical lithography of WSi <sub>6</sub> superconducting nanowire single photon detectors	Beyer Andrew
5	FDM read out assembly with flexible, superconducting connection to cryogenic kilo-pixel TES detectors	Bruijn Marcel
5	Fabrication of transition edge sensor microcalorimeters for x-ray focal planes	Chervenak James
5	Feedhorn-Coupled Transition Edge Sensor Arrays for Measurement of the Cosmic Microwave Background Polarization	Denis Kevin
5	Microfabrication technology for large LEKID arrays: from NIKA2 to future applications	GOUPY Johannes
5	Study of the fabricating multilayer absorber with the aim of improving detection efficiency of TES X-ray micro calorimeter array	HAYASHI Tasuku
5	Kinematic mounting of stackable multi-layer large format low temperature arrays	Moseley Samuel
5	Composite Reflective/Absorptive IR-Blocking Filters on Metamaterial Anti-reflection Coated Silicon	Munson Charles
5	Development of NTD Ge Sensors for Superconducting Bolometer	Nanal Vandana
5	NTD-Ge development in the LUMINEU project for Rare Events searches with cryogenic detectors	Navick Xavier-François
5	Advanced ACTPol detector-readout interface: High-density superconducting cable fabrication process and array assembly techniques	Pappas Christine
5	Microfabrication of Metallic Magnetic Calorimeters	Schötz Christian
5	Fabrication of Neganov-Luke Amplified Cryogenic Light Detectors with Silicon Light Absorbers for Rare Event Search Experiments	Willers Michael

## SPOTS SPECIAL POSTER SESSION 2: READOUT ELECTRONICS II (T3.1)

5	Pulse pile-up does not have to ruin everything: using microcalorimeters at high count rate	Fowler Joseph
5	4 Kelvin cryogenic characterization of commercial pHEMT transistors at 9 kHz to 8.5 GHz range	Ibarra-Medel Eduardo
5	A front-end electronics for MKID-array readout towards observation of CMB polarization	Ishitsuka Hikaru
5	Development of Frequency Sweeping Readout System for Microwave Kinetic Inductance Detectors	Karatsu Kenichi
5	In Focal Plane Multiplexing Circuitry for Next-Generation Arrays	Lowell Peter
5	Planar Lithographed Superconducting LC Resonators for Frequency-Domain Multiplexed Readout Systems	Rotermund Kaja
5	Development of Frequency-Division Multiplexing Readout System for Large-Format TES X-Ray Microcalorimeter Arrays	Sakai Kazuhiro
5	World's cheapest readout electronics for kinetic inductance detector by using RedPitaya	Tomita Nozomu
5	Superconducting strip ion detectors (SSIDs) with single flux quantum based time-to-digital converters (SFQ TDCs) for time-of-flight mass spectrometry (TOF MS)	Zen Nobuyuki

### SPOTS SPECIAL POSTER SESSION 3: MM-WAVE DEVICES (T3.2)

	Characterization of the first multichroic polarimeter array on the Atacama Cosmology Telescope	Ho Shuay-Pwu Patty
5	Advanced ACTPol Multichroic Horn-Coupled Polarimeter Array Fabrication on 150 mm Wafers	Duff Shannon
5	Multi-chroic Antenna-array coupled TES bolometers for CMB polarimetry	OBrient Roger
5	Dual-Band High-Frequency Microwave Polarimeters for Advanced ACTPol	Austermann Jason
5	DEVELOPMENT OF LUMPED ELEMENT KINETIC INDUCTANCE DETECTORS FOR THE W-BAND	Coppolecchia Alessandro
5	Multi-mode TES chip optimization for the LSPE-SWIPE instrument	Gualtieri Riccardo
5	Laboratory Characterization of SuperSpec	Hailey-Dunsheath Steven
5	Radiation Tolerance of Al Microwave Kinetic Inductance Detector	Karatsu Kenichi
5	Demonstration and Characterization of $\mu$ Spec: An Integrated Photonic Spectrometer for Submillimeter Astrophysics in Space	Noroozian Omid
5	Direct machined broadband corrugated horn array for millimeter observations	Sekiguchi Shigeyuki
5	Recent results from SuperSpec, a KID-based on-chip spectrometer for mm-wavelength astronomy.	Shirokoff Erik
5	The broadband anti-reflection coated extended hemispherical silicon lenses for Polarbear-2 experiment.	Siritanasak Praween
5	Traveling-Wave Kinetic Inductance Amplifier using 3 wave mixing	Vissers Michael

### SPECIAL POSTER SESSION 4: APPLICATIONS (T3.3 & T3.5)

5	<b>Cryogenics for LTD (T3.3)</b>	
5	Progress on 1 Kelvin General-purpose Refrigeration employing Superconducting Tunnel Junctions	Zhang Xiaohang
5	<b>Applications &amp; Outreach (T3.5)</b>	
5	Commercial Release of a Ta-based Superconducting Tunnel Junction X-Ray Detector for Synchrotron Science	Carpenter Matthew
5	An X-ray TES detector head for high-precision composition analysis	Kenichiro Nagayoshi
5	Above-ground measurements of CaMoO <sub>4</sub> crystal detectors using metallic magnetic calorimeters	Kim Geon-Bo
5	Monitoring system for atmospheric water vapor with a ground-based multi-band radiometer -- an application of radio astronomy technologies into meteorology	Nagasaki Taketo
5	New application stages of superconducting tunnel junctions in scientific instrumentation	Ohkubo Masataka
5	Precision measurement of nuclear recoil ionization yields for low mass wimp searches	Saab Tarek
5	The LUCIFER project - current status and perspectives	Schäffner Karoline

# Thursday 23

## SESSION 5 8:15 – 12:45

<b>Applications : mm&amp;submm astronomy (T4.2)</b>		
15	SPT-3G: The Next Generation Receiver for the South Pole Telescope	Bender Amy
15	Status report on the NIKA2 instrument, a dual-band kilopixel KID array for millimetric astronomy	Calvo Martino
15	Lumped Elements Kinetic Inductance Detectors maturity for space missions	Catalano Andrea
15	The Cosmology Large Angular Scale Surveyor (CLASS) Focal Plane Development	Chuss David
15	Probing the Epoch of Reionization with the TIME-Pilot [CII] Intensity Mapping Experiment	Crites Abigail
15	Cryogenic detector arrays and readout for AdvACTPol	Henderson Shawn
15	Advances in Multichroic Feedhorn-Coupled TES Polarimeter Arrays for CMB Measurements	Hubmayr Johannes
15	The Keck Array: 220 GHz Upgrade and on Sky Performance	Kefeli Sinan
15	Lite satellite for the study of B-mode polarization and Inflation from cosmic microwave background radiation detection, LiteBIRD	Matsumura Tomotake
Break		
15	GISMO: a summary of many years of observations at the IRAM 30m telescope, and lessons learned for the design of GISMO-2	Staguhn Johannes
15	The POLARBEAR-2 and the Simons Array Experiment	Suzuki Aritoki
15	Technological Developments and Initial Observations from BICEP3: a 95GHz CMB polarimeter	Wu Jimmy
10	Design and performance of MAKO, a 350 $\mu\text{m}$ camera for the CalTech Submillimeter Observatory	McKenney Christopher
10	The NIKA 2015 observation campaign: first polarised light with Lumped Element Kinetic Inductance Detectors	Ritacco Alessia
10	A THz superconducting imaging array developed for the DATE5 telescope	SHI Sheng-Cai
10	Performance of Backshort-Under-Grid Kilopixel TES Arrays for HAWC+	Staguhn Johannes
10	QUBIC : A Fizeau interferometer targeting primordial B-Modes	Tartari Andrea

## SESSION 6 13:30 – 18:00

<b>Applications : X-Ray, VIS, NIR &amp; Gamma (T4.1)</b>		
20	TES microcalorimeter spectrometers for x-ray science	Ullom J. N.
15	Time - resolved x - ray absorption spectroscopy of ferrioxalate using a laser plasma source and microcalorimeter detectors	Galen O'Neil
15	maXs: Micro-calorimeter Arrays for High Resolution X-Ray Spectroscopy in Atomic Physics	Krantz Matthäus
15	Microwave Kinetic Inductance Detectors for Exoplanet Imaging	Meeker Seth R.
15	Soft X-ray Spectrometer, SXS, onboard ASTRO-H - status and performance	Mitsuda Kazuhisa
15	What We Learned By Measuring Billions Of Counts with an Operational 256-Pixel Microcalorimeter Gamma-Ray Spectrometer: Lessons for the Next Wave of X-ray & Gamma-ray Arrays	Rabin Michael
10	Searching for keV Sterile Neutrino Dark Matter with X-ray Microcalorimeter Sounding Rockets	Figueroa-Feliciano Enectali
10	Performance and limitations of the pulse shape processor of ASTRO-H SXS for bright X-ray targets	Ishisaki Yoshitaka
10	High and low flux nonlinearity correction of NIR H2RG 2Kx2K arrays	Kubik Bogna
10	The Cryogenic AntiCoincidence detector for the ATHENA X-IFU instrument: results from the design performed by GEANT4 simulation, and characterization of the new single pixel prototype as basic-element of the final 2x2 array.	Macculi Claudio
10	Thermal filters for the X-IFU detector on board of ATHENA: conceptual design and ongoing development activities	Marco Barbera
10	Future Japanese X-ray TES calorimeter satellite: DIOS (Diffuse Intergalactic Oxygen Surveyor)	Yamada Shin'ya
break		
<b>Applications : Material analysis and life science (T4.3)</b>		
15	MOCCA: a 4k-pixel molecule camera for the position and energy resolving detection of neutral molecular fragments at CSR	Gamer Lisa
15	A transition edge sensor micro-calorimeter system for the energy dispersive spectroscopy performed on a scanning-transmission electron microscope	Maehata Keisuke
10	Superconducting transition edge sensor for heavy ion detection	Ohno Masashi
10	Common bias readout for TES array on Scanning Transmission Electron Telescope	Yamamoto Ryo



# Friday 24

## SESSION 7 8:30 – 12:30

<b>Applications : Dark Matter, Neutrinos and Rare event search (T4.4)</b>		
20	Overview of dark matter experiments	Gerbier Gilles
15	Status and prospects of the EDELWEISS direct WIMP search experiment	JUILLARD Alexandre
15	Improving the Energy Sensitivity of Massive Calorimeters to Search for Light Mass Dark Matter	Pyle Matt
15	Exploring low mass WIMPs with CRESST	STRAUSS Raimund
15	Background suppression in large mass TeO2 bolometers with Neganov-Luke amplified light detectors	Pattavina Luca
Break		
20	Neutrino experiments	Gatti Flavio
15	Neutrinoless double beta decay with CUORE-0: physics results and detector performance	Canonica Lucia
15	Optimization of metallic magnetic calorimeters with embedded Ho-163	Gastaldo Loredana
15	AMoRE neutrinoless double beta decay experiment using low temperature 40Ca100MoO4 calorimeters	Kim Yong-Hamb
15	Holmium Electron Capture Spectroscopy with Transition Edge Sensors	Kunde Gerd J.
15	The HOLMES experiment	Nucciotti Angelo
15	Transition-edge sensor arrays of microcalorimeters with Ho-163 for direct neutrino mass measurements with HOLMES	Orlando Angiola

## SESSION 8 13:30-14:30

<b>Applications : Particles and nuclear physics (T4.5)</b>		
15	Determination of nuclear charge distributions of fission fragments from 235U (nth, f) with Calorimetric Low Temperature Detectors	Egelhof Peter
15	The CUORE cryostat: a 1-ton scale setup for bolometric detectors	Ligi Carlo
15	Cryogenic detectors for rare alpha decays search: a new approach	Nagorny Serge
15	First application of transition edge sensors for high-resolution hadronic atom X-ray spectroscopy	Tatsuno Hideyuki
<b>Closure</b>		