## Low Temperature Physics Division Fachverband Tiefe Temperaturen (TT)

Rudolf Gross Walther-Meissner Institut Bayerische Akademie der Wissenschaften Walther-Meissner Str. 8 85748 Garching Rudolf.Gross@wmi.badw-muenchen.de

## Overview of Invited Talks and Sessions

(lecture rooms H 0104, H 2053, H 3005, H 3010, BH 243 and BH 334 ; Poster Area B)

#### Invited Talks

(except focused sessions, see below for the focused session program)

TT 14.1	Mon	16:45 - 17:15	H $3005$	Multiferroicity in an organic charge-transfer salt: Electric-dipole-
				driven magnetism — •Peter Lunkenheimer
TT 17.10	Tue	12:00-12:30	H 2053	Magnetism and Superconductivity: A new era of convergence in
				condensed matter physics — $\bullet$ Piers Coleman
TT 19.8	Tue	11:30-12:00	H 3010	Interactions and disorder in topological quantum matter — $\bullet$ SIMON
				Trebst
TT 20.1	Tue	9:30 - 10:00	BH 243	Making and manipulating Majorana fermions for topological quan-
				tum computation — •Felix von Oppen
TT 30.1	Wed	15:00 - 15:30	H $3005$	Bose-Einstein condensation of Photons — •MARTIN WEITZ
$TT \ 20.5$	Tue	11:00-11:30	BH 243	Distinguishing quantum and classical transport through nanostruc-
				$tures - \bullet CLIVE Emary$
TT 29.7	Wed	16:45 - 17:15	H 2053	Novel Josephson effect in triplet Josephson junctions: the story
				$begins - \bullet Dirk Manske$
TT 30.8	Wed	17:15-17:45	H 3005	Topological superfluids confined in a regular nano-scale slab geom-
				etry — •John Saunders
TT 38.8	Thu	11:30-12:00	H 3010	${ m Emergent}$ electrodynamics of skyrmions in chiral magnets $-$
				•Christian Pfleiderer

### Invited and Topical Talks in the Focused Session "Resonant Inelastic X-ray Scattering on Magnetic Excitations"

TT 7 1	Mon	15.00-15.40	H 0104	RIXS Studies of Strongly Correlated Floctron Systems - JOHN HILL
11 (.1	MOII	10.00-10.40	11 0104	TIAS Studies of Strongly Correlated Electron Systems — •John The
TT 7.2	Mon	15:40 - 16:20	H 0104	<b>RIXS</b> in the soft X-ray range: applications and perspectives — •LUCIO
				Braicovich
TT 7.3	Mon	16:40 - 17:20	H $0104$	The theory of resonant inelastic x-ray scattering on valence excitations
				- •Michel van Veenendaal
TT 7.4	Mon	17:20 - 18:00	H 0104	Excitons as a probe for low-energy spin fluctuations in cuprate chains
				— •Jochen Geck
TT 7.5	Mon	18:00 - 18:40	H $0104$	Fractionalization of electronic degrees of freedom in low-dimensional
				cuprates — •Justine Schlappa

Invited and Topical Talks in the Focused Session "Charge and Spin Transport through Junctions at the Nanometre Scale"

TT 35.1	Thu	9:30 - 10:10	H $0104$	The information is the noise: shot noise a tool for investigating atomic
				and molecular nanowires — •JAN VAN RUITENBEEK
TT 35.2	Thu	10:10-10:50	H $0104$	Electronic transport and magnetism in one-atom contacts — $\bullet$ CARLOS
				Untiedt

TT 35.3	Thu	10:50-11:30	H 0104	Metallic atomic-size contacts: The role of absorbed noble gas atoms
				and anisotropic magnetoresistance — •JUAN CARLOS CUEVAS
TT 35.4	Thu	11:40-12:20	H $0104$	Spin transport through organic molecules — • WULF WULFHEKEL
TT 35.5	Thu	12:20 - 13:00	H $0104$	Spin-current manipulation of atomic-scale magnets using ${ m SP-STM}$ —
				•Stefan Krause

## Invited and Topical Talks in the Focused Session "Cryogenic Detectors"

TT 41.1	Thu	15:00 - 15:30	H $2053$	Performance and Understanding of Transition-Edge Sensor Mi-
				crocalorimeters — •Simon Bandler
$\mathrm{TT}~41.2$	Thu	15:30 - 16:00	H $2053$	Kinetic Inductance Detectors — • JOCHEM BASELMANS
TT 41.3	Thu	16:15-16:40	H $2053$	Magnetic calorimeters for x-ray and particle detection — $\bullet$ ANDREAS
				Fleischmann
TT 41.4	Thu	16:40 - 17:05	H $2053$	Readout of TESs and MCCs with SQUID current sensors — •JÖRN
				Beyer
$TT \ 41.5$	Thu	17:05-17:30	H $2053$	Direct Dark Matter Search with the CRESST II Detector — •JEAN-
				Côme Lanfranchi

# **Invited talks of the joint symposium SYTI** See SYTI for the full program of the symposium.

SYTI 1.1	Tue	9:30-10:00	H $0105$	Search for Majorana fermions in topological insulators — •CARLO
				Beenakker
SYTI 1.2	Tue	10:00-10:30	H $0105$	Cooper Pairs in Topological Insulator $Bi_2Se_3$ Thin Films Induced by
				Proximity Effect — • JINFENG JIA
SYTI 1.3	Tue	10:30 - 11:00	$H \ 0105$	Gate tunable normal and superconducting transport through a 3D
				topological insulator — •Alberto Morpurgo
SYTI 1.4	Tue	11:00-11:30	H $0105$	Weyl Metal States and Surface Fermi Arcs in Iridates — •SERGEY
				SAVRASOV
SYTI $1.5$	Tue	11:30-12:00	H 0105	Engineering a Room-Temperature Quantum Spin Hall State in
				Graphene via Adatom Deposition — • MARCEL FRANZ

#### Invited talks of the joint symposium SYNM

See SYNM for the full program of the symposium.

SYNM 1.1	Wed	15:00-15:30	H $0105$	Mechanical resonators in the quantum regime — •ANDREW N. CLE-
				LAND
SYNM 1.2	Wed	15:30 - 16:00	H $0105$	Quantum optomechanics: exploring the interface between quantum
				physics and gravity — •Markus Aspelmeyer
SYNM 1.3	Wed	16:00-16:30	H 0105	Integrated transduction and coherent control of high Q nanome-
				chanical systems using dielectric gradient forces — •EVA M. WEIG
SYNM 1.4	Wed	16:30-17:00	H $0105$	Cavity optomechanics with microwave photons — • JOHN TEUFEL
SYNM 1.5	Wed	17:00-17:30	H $0105$	<b>Optomechanical crystals</b> — •OSKAR PAINTER

#### Sessions

TT 1.1–1.14	Mon	9:30-13:15	H $0104$	Correlated Electrons: Low-dimensional Systems - Models 1
TT 2.1–2.13	Mon	9:30-13:00	H 2053	Superconductivity: Fe-based Superconductors - 1111, LiFeAs
				& As-free Pnictides
TT 3.1–3.14	Mon	9:30-13:15	H 3005	Correlated Electrons: Heavy Fermions
TT 4.1–4.13	Mon	9:30-13:00	H 3010	Transport: Topological Insulators 1 (jointly with HL and
				MA)
TT $5.1 - 5.12$	Mon	9:30-12:45	BH 243	Transport: Quantum Coherence and Quantum Information
				Systems 1 (jointly with MA and HL)
TT 6.1–6.13	Mon	9:30-13:00	BH 334	Transport: Nanoelectronics I - Quantum Dots, Wires, Point
				Contacts 1

TT 7.1–7.5	Mon	15:00-18:40	H 0104	Focused Session: Resonant Inelastic X-ray Scattering on Magnetic Excitations
TT 8 1–8 13	Mon	15.00 - 18.30	H 2053	Superconductivity: Fe-based Superconductors - 122 Part 1
TT 9.1–9.6	Mon	15:00-16:30	H 3005	Transport: Topological Insulators 2 (jointly with HL and MA)
TT 10.1–10.12	Mon	15:00-18:15	H 3010	Correlated Electrons: (General) Theory 1
TT 11.1–11.9	Mon	15:00-17:30	BH 243	Transport: Quantum Coherence and Quantum Information Systems 2 (jointly with MA and HL)
TT 12.1–12.6	Mon	15:00-16:30	BH 334	Transport: Nanoelectronics I - Quantum Dots, Wires, Point Contacts 2
TT 13.1–13.54	Mon	15:00 - 19:00	Poster B	Transport: Poster Session
TT 14.1–14.4	Mon	16:45 - 18:00	H 3005	Matter At Low Temperature: Multiferroics (jointly with MA, DF, DS, KR
TT 15.1–15.5	Mon	16:45 - 18:00	BH 334	Correlated Electrons: Quantum Impurities, Kondo Physics 1
TT 16.1–16.14	Tue	9:30-13:15	H 0104	Correlated Electrons: Low-dimensional Systems - Models 2
TT 17.1–17.10	Tue	9:30-12:30	H 2053	Superconductivity: Fe-based Superconductors - 122 Part 2 & Theory
TT 18.1–18.12	Tue	9:30-12:45	H 3005	Correlated Electrons: Quantum Impurities, Kondo Physics 2
TT 19.1–19.12	Tue	9:30-13:00	H 3010	Correlated Electrons: (General) Theory 2
TT 20.1–20.8	Tue	9:30-12:15	BH 243	Transport: Quantum Coherence and Quantum Information
		0.000		Systems 3 (jointly with MA and HL)
TT 21.1–21.13	Tue	9:30-13:00	BH 334	Transport: Nanoelectronics I - Quantum Dots, Wires, Point Contacts 3
TT 22.1–22.13	Wed	9:30-13:00	H 0104	Correlated Electrons: Low-dimensional Systems - Materials 1
TT 23.1–23.7	Wed	9:30-11:15	H 2053	Superconductivity: Fe-based Superconductors - Fe(Se/Te)
TT 24.1–24.12	Wed	9:30-12:45	H 3005	Nanomechanics
TT 25.1–25.12	Wed	9:30-12:45	H 3010	Correlated Electrons: Quantum-Critical Phenomena 1
TT 26.1–26.13	Wed	9:30-13:00	BH 334	Transport: Topological Insulators 3 (jointly with HL and MA)
TT 27.1–27.7	Wed	11:30-13:15	H 2053	Superconductivity: Cuprate Superconductors
TT 28.1–28.13	Wed	15:00-18:30	H 0104	Correlated Electrons: Low-dimensional Systems - Materials 2
TT 29.1–29.12	Wed	15:00-18:30	H 2053	Superconductivity: Tunnelling, Josephson Junctions, SQUIDs 1
TT 30.1–30.12	Wed	15:00-18:45	H 3005	Matter At Low Temperature: Quantum Liquids, Bose- Einstein Condensates, Ultra-cold Atoms, 1
TT 31.1–31.5	Wed	15:00-16:15	H 3010	Correlated Electrons: Quantum-Critical Phenomena 2
TT 32.1–32.9	Wed	15:00 - 17:30	BH 334	Transport: Nanoelectronics III - Molecular Electronics 1
TT 33.1–33.74	Wed	15:00-19:00	Poster B	Superconductivity, Measuring Devices, Matter at Low Temperature: Poster Session
TT 34.1–34.6	Wed	16:30-18:00	H 3010	Correlated Electrons: Metal-Insulator Transition 1
TT 35.1–35.5	Thu	9:30-13:00	H 0104	Focused Session: Charge and Spin Transport through Junc-
				tions at the Nanometre Scale
TT 36.1–36.10	Thu	9:30-12:15	H 2053	Superconductivity: Cryodetectors
TT 37.1–37.13	Thu	9:30-13:00	H 3005	Matter At Low Temperature: Quantum Liquids, Bose- Einstein Condensates, Ultra-cold Atoms, 2
TT 38.1–38.12	Thu	9:30 - 13:00	H 3010	Correlated Electrons: Spin Systems and Itinerant Magnets 1
TT 39.1–39.13	Thu	9:30-13:00	BH 334	Transport: Graphene 1 (jointly with MA, HL, DY, DS, O)
TT 40 1–40 12	Thu	15.00 - 18.15	H 0104	Correlated Electrons: Low-dimensional Systems - Materials
TT 41 1 41 5	Thy	15.00 17.20	ц 9059	3 Feauged Session: Cryogenia Detectors
1141.1-41.0	Thu	15:00-17:50 15:00, 19:00	П 2005	Focused Session: Cryogenic Detectors
1 1 42.1-42.11	1 nu	15:00-18:00	п 3005	Superconductivity: Fabrication, Properties, Electronic Structure
11 43.1-43.10	Thu	15:00-17:45	H 3010	Correlated Electrons: Metal-Insulator Transition 2
11 44.1–44.8	Thu	15:00-17:15	BH 334	Transport: Nanoelectronics III - Molecular Electronics 2
TT 45.1–45.111	Thu	15:00-19:00	Poster B	Correlated Electrons: Poster Session
TT 46.1–46.8	Thu	17:45 - 20:00	H 2053	Superconductivity: Tunnelling, Josephson Junctions, SQUIDs 2
TT 47.1–47.12	Fri	9:30-12:45	H $0104$	Correlated Electrons: Spin Systems and Itinerant Magnets 2

Low Tempera	ture P	hysics Divisio	on (TT)	Overview
TT 48.1–48.13	Fri	9:30-13:00	H 2053	Superconductivity: Heterostructures, Andreev Scattering, Provimity Effect, Vortices
TT 49.1–49.9	Fri	9:30-12:00	H 3005	Correlated Electrons: Low-dimensional Systems - Materials
TT 50.1–50.10	Fri	9:30-12:15	H 3010	4 Superconductivity: (General) Theory
TT 51.1 $-51.9$	$\operatorname{Fri}$	9:30-12:00	$\rm BH\ 243$	Transport: Nanoelectronics II - Spintronics and Magneto-
TT 52.1–52.12	Fri	9:30-12:45	BH 334	transport (jointly with HL and MA) Transport: Graphene 2 (jointly with MA, HL, DY, DS, O)

## Annual General Meeting of the Low Temperature Physics Division

20:15 H 3005 Thursday