TIEFE TEMPERATUREN (TT)

Prof. Dr. Gerd Schön
Institut für Theoretische Festkörperphysik
Universität Karlsruhe
76128 Karlsruhe
E-Mail: gerd.schoen@phys.uni-karlsruhe.de

ÜBERSICHT DER HAUPTVORTRÄGE UND FACHSITZUNGEN

(Hörsäle TU H104, TU H2053, TU H3027)

Hauptvorträge

TT 4.1	Fr	14:00	(TU H104)	**Phase Sensitive Tests with Cuprate Superconductors Based on the Josephson Effect and Andreev bound states**, Boris Chesca, Dietmar Dönitz, Dieter Kölle, Reinhold Kleiner, A. Tsukada, Michio Naito, Ariando, Hans Hilgenkamp
TT 4.3	Fr	14:45	(TU H104)	**Angle-Resolved Photoemission Spectroscopy of High-T_c Superconductors: Identifying the Pairing Boson**, Sergey Borisenko
TT 7.1	Fr	16:30	(TU H2053)	**Self-Energy Functionals: A New Approach to Strongly Correlated Electron Systems**, Michael Potthoff
TT 9.1	Fr	17:00	(TU H3027)	**Ultracold Atoms in Optical Lattices: Tunable Quantum Many-Body Systems**, Walter Hofstetter
TT 14.1	Sa	13:45	(TU H104)	**Flux Qubits**, Hans Mooij
TT 14.2	Sa	14:15	(TU H104)	**Single-Shot State Measurement of Coupled Phase Qubits**, John Martinis
TT 17.1	Mo	10:15	(TU H104)	**From Spin to Quantum Order in Coordination Polymer Magnets**, Collin Broholm
TT 17.2	Mo	10:50	(TU H104)	**Design, Synthesis and Study of Model Quantum Magnets**, Andrew Harrison
TT 18.1	Mo	10:00	(TU H2053)	**Two-Gap Superconductivity in MgB_2**, Thomas Dahm
TT 18.8	Mo	12:00	(TU H2053)	**Point-Contact Spectroscopy on Conventional and Unconventional Superconductors**, Gernot Goll
TT 19.5	Mo	11:00	(TU H3027)	**Spin Pumping in a Mesoscopic Spin Battery**, Bart van Wees
TT 19.6	Mo	11:30	(TU H3027)	**Intrinsic Spin Hall Effect**, Shuichi Murakami
TT 20.1	Mo	12:30	(TU P270)	**Quantum Correlations in Mesoscopic Systems**, Wolfgang Belzig
TT 21.2	Mo	14:25	(TU H104)	**2D Quantum Antiferromagnets from Néel-Ordered Phases to Spin Liquids**, Claire Lhuillier
TT 21.6	Mo	16:20	(TU H104)	**Geometrical Frustration as Paradigm for Low Temperature Physics**, Arthur Ramirez
TT 24.1	Di	10:15	(TU H104)	**Single-Electron Transport in Nano-Electromechanical Devices**, Yaroslav M. Blanter
TT 24.2	Di	10:50	(TU H104)	**Nano-Electromechanical Systems with Carbon Nanotubes**, Yuval Yaish, Vera Sazonova, Ethan D. Minot, Hande Üstünel, David Roundy, Tomas A. Arias, Paul L. McEuen
TT 28.1	Di	14:00	(TU H104)	**Cryogenic Detectors for X-ray Astronomy**, Piet de Korte

Fachsitzungen

TT 1	**Superconductivity - Fabrication, Technical Optimization and Characterization**	Fr 10:15–13:00	TU H104	TT 1.1–1.11
TT 2	**Correlated Electrons - Metal Insulator Transition**	Fr 10:15–13:00	TU H2053	TT 2.1–2.11
TT 3	**Correlated Electrons - Heavy Fermions**	Fr 10:15–13:00	TU H3027	TT 3.1–3.11

TT 4	**Symposium Superconducting Cuprates**	Fr	14:00–17:45	TU H104	TT 4.1–4.10
TT 5	**Superconductivity - Mechanisms, Phase Diagram, Competing Order**	Fr	18:00–19:00	TU H104	TT 5.1–5.4
TT 6	**Correlated Electrons - (General) Theory I**	Fr	14:00–16:15	TU H2053	TT 6.1–6.9
TT 7	**Correlated Electrons - (General) Theory II**	Fr	16:30–18:45	TU H2053	TT 7.1–7.8
TT 8	**Posters Transport**	Fr	14:00–18:00	Poster TU C	TT 8.1–8.53
TT 9	**Solids at Low Temperature - Quantum Liquids, Bose-Einstein Condensates, Ultracold Atoms, ...**	Fr	17:00–18:45	TU H3027	TT 9.1–9.6
TT 10	**Superconductivity - Tunneling, Josephson Junctions, SQUIDs**	Sa	08:30–12:45	TU H104	TT 10.1–10.16
TT 11	**Correlated Electrons - Spin Systems and Itinerant Magnets: Theory**	Sa	08:45–10:30	TU H2053	TT 11.1–11.7
TT 12	**Correlated Electrons - Spin Systems and Itinerant Magnets: Experiment**	Sa	10:45–12:45	TU H2053	TT 12.1–12.8
TT 13	**Transport - Quantum Coherence and Quantum Information Systems**	Sa	08:45–12:45	TU H3027	TT 13.1–13.15
TT 14	**Symposium Superconducting Quantum Systems**	Sa	13:45–16:45	TU H104	TT 14.1–14.6
TT 15	**Superconductivity - Properties, Electronic Structure, Order Parameter I**	Sa	14:00–16:45	TU H2053	TT 15.1–15.10
TT 16	**Posters Correlated Electrons, Measuring Devices, Cryotechnique**	Sa	11:00–16:30	Poster TU C	TT 16.1–16.92
TT 17	**Symposium Quantum Magnetism in Molecule-based Materials**	Mo	10:15–13:00	TU H104	TT 17.1–17.6
TT 18	**Superconductivity - Properties, Electronic Structure, Order Parameter II**	Mo	10:00–13:00	TU H2053	TT 18.1–18.10
TT 19	**Transport - Nanoelectronics I: Spintronics and Magnetotransport**	Mo	10:00–12:15	TU H3027	TT 19.1–19.7
TT 20	**Schottky Award Lecture**	Mo	12:30–13:15	TU P270	TT 20.1–20.1
TT 21	**Symposium Frustrated Systems**	Mo	14:00–18:00	TU H104	TT 21.1–21.9
TT 22	**Transport - Nanoelectronics II: Quantum Dots and Wires, Point Contacts**	Mo	14:00–17:30	TU H2053	TT 22.1–22.13
TT 23	**Posters Superconductivity, Solids at Low Temperature**	Mo	14:00–18:00	Poster TU D	TT 23.1–23.62
TT 24	**Symposium Nanomechanics**	Di	10:15–12:50	TU H104	TT 24.1–24.5
TT 25	**Correlated Electrons - Low-dimensional Systems: Models**	Di	09:45–13:00	TU H2053	TT 25.1–25.13
TT 26	**Superconductivity - Heterostructures, Andreev Scattering, Proximity Effect, Coexistence**	Di	10:15–11:45	TU H3027	TT 26.1–26.6
TT 27	**Solids at Low Temperature - New Materials**	Di	12:00–12:30	TU H3027	TT 27.1–27.2
TT 28	**Superconductivity - Applications I : Cryodetectors**	Di	14:00–16:00	TU H104	TT 28.1–28.7
TT 29	**Measuring Devices, Cryotechnique**	Di	16:15–16:45	TU H104	TT 29.1–29.2
TT 30	**Superconductivity - Applications II : Levitation, SQUID-based Sensors, Devices**	Di	16:45–18:15	TU H104	TT 30.1–30.6
TT 31	**Correlated Electrons - Low-dimensional Materials I**	Di	14:00–16:00	TU H2053	TT 31.1–31.8
TT 32	**Correlated Electrons - Low-dimensional Materials II**	Di	16:15–18:30	TU H2053	TT 32.1–32.9
TT 33	**Transport - Nanoelectronics III: Molecular Electronics**	Di	14:00–18:00	TU H3027	TT 33.1–33.15
TT 34	**Correlated Electrons - Quantum Impurities, Kondo Physics**	Mi	09:45–11:15	TU H104	TT 34.1–34.6
TT 35	**Correlated Electrons - Quantum Critical Phenomena**	Mi	11:15–13:00	TU H104	TT 35.1–35.7
TT 36	**Superconductivity - Vortex Dynamics, Vortex Phases, Pinning**	Mi	10:00–13:00	TU H2053	TT 36.1–36.11
TT 37	**Transport - Fluctuations and Noise**	Mi	10:15–12:15	TU H3027	TT 37.1–37.8

Übersicht über die Sitzungen des Fachverbands Tiefe Temperaturen

Alle angegebenen Veranstaltung finden in Hörsälen der TU Berlin statt.

PV: Plenarvortrag ; ÖAV: Öffentlicher Abendvortrag; HV: Hauptvortrag ; FV: Fachvortrag ; SY:Symposium

SC: Superconductivity ; CE: Correlated Electrons ; TR: Transport ; SLT: Solids at Low Temperature

Freitag, 4.3.05

8:30-9:30 *PV Kouwenhoven*

Vormittag **SYQL** HE101
SY Measurements at the Quantum Limit

10:15-13:00 **TT 1** H104
SC - Fabrication, Technical Optimization and Characterization

10:15-13:00 **TT 2** H2053
CE - Metal-Insulator Transition

10:15-13:00 **TT 3** H3027
CE - Heavy Fermions

14:00-17:45 **TT 4** H104
SY Superconducting Cuprates
14:00 HV Chesca
14:45 HV Borisenko
15:15 FV Hackl
16:00 FV Uhrig

18:00-19:00 **TT 5** H104
SC - Mechanisms, Phase Diagram, Competing Order

14:00-16:15 **TT 6** H2053
CE - (General) Theory I

16:30-19:00 **TT 7** H2053
CE - (General) Theory II
16:30 HV Potthoff

14:00-18:00 **TT 8** TU-C (2.OG)
Posters: Transport

17:00-18:45 **TT 9** H3027
SLT - Quantum Liquids, BE Condensates, Ultracold Atoms, ...
17:00 HV Hofstetter

20:00-21:30 *ÖAV Gaub*

Samstag, 5.3.05

Vormittag **SYRS** H3010
SY Renormalization and Scaling

8:30-12:45 **TT 10** H104
SC - Tunneling, Josephson Junctions, SQUIDs

8:45-10:30 **TT 11** H2053
CE - Spin Systems and Itinerant Magnets: Theory

10:45-12:45 **TT 12** H2053
CE - Spin Systems and Itinerant Magnets: Experiment

8:45-12:45 **TT 13** H3027
TR - Quantum Coherence and Quantum Information Systems

13:45-16:45 **TT 14** H104
SY Superconducting Quantum Systems
13:45 HV Mooij
14:15 HV Martinis
14:45 FV Duty
15:15 FV Wallraff
15:45 FV Fazio
16:15 FV Wilhelm

14:00-16:45 **TT 15** H2053
SC - Properties, Electronic Structure, Order Parameter I

11:00-16:30 **TT 16** TU-C (2.OG)
Posters: Correlated Electrons, Measuring Devices, Cryotechnique

17:00-18:00 *PVe Cesarsky & Ekert*

18:15-21:15 Welcome evening for all participants

Montag, 7.3.05

8:30-9:30 *PVe Norton & Kroemer*

10:15-13:00 **TT 17** H104
SY Quantum Magnetism
in Molecule-based Materials
10:15 HV Broholm
10:50 HV Harrison
11:30 FV Lang
12:00 FV Honecker

10:00-13:00 **TT 18** H2053
SC - Properties, Electronic
Structure, Order Parameter II
10:00 HV Dahm

12:00 HV Goll

10:00-13:00 **TT 19** H3027
TR - Nanoelectronics I:
Spintronics and Magnetotransport

11:00 HV van Wees
11:30 HV Murakami

12:30-13:15 **TT 20** P270
Schottky Award Lecture by *Belzig*

14:00-18:00 **TT 21** H104
SY Frustrated Systems
14:00 FV Brenig
14:25 HV Lhuillier
14:50 FV Fulde
15:15 FV Moessner
15:40 FV Troyer
16:20 HV Ramirez
16:45 FV Hemberger
17:10 FV Lemmens
17:35 FV Geck

14:00-17:30 **TT 22** H2053
TR - Nanoelectronics II:
Quantum Dots and Wires,
Point Contacts

14:00-18:00 **TT 23** TU-D (3.OG)
Posters: Superconductivity,
Solids at Low Temperature

18:00-19:45 **Allgemeine Mitgliederversammlung der DPG**

20:00-21:30 *ÖAV Dosch*

Dienstag, 8.3.05

8:30-9:30 *PV Braun-Munzinger*

10:15-13:00 **TT 24** H104
SY Nanomechanics
10:15 HV Blanter
10:50 HV Yaish
11:30 FV Kotthaus
12:00 FV Shnirman

9:45-13:00 **TT 25** H2053
CE - Low-dimensional
Systems: Models

10:15-11:45 **TT 26** H3027
SC - Heterostructures,
Andreev Scattering,
Proximity Effect, Coexistence

12:00-12:30 **TT 27** H3027
SLT - New Materials

14:00-16:00 **TT 28** H104
SC - Applications I: Cryodetectors
14:00 HV de Korte

16:15-16:45 **TT 29** H104
Measuring Devices, Cryotechnique

16:45-18:15 **TT 30** H104
SC - Applications II: Levitation,
SQUID-based Sensors, Devices

14:00-16:00 **TT 31** H2053
CE - Low-dimensional Materials I

16:15-18:30 **TT 32** H2053
CE - Low-dimensional Materials II

14:00-18:00 **TT 33** H3027
TR - Nanoelectronics III:
Molecular Electronics

18:30-19:45 **TT-Mitgliederversammlung** H2053

20:00-21:30 *ÖAV Keller*

Mittwoch, 9.3.05

8:30-9:30 *PV Sarachik*

Ganztägig **SYUA** HU Audimax
SY Mesoscopic Physics of Ultracold Atoms

9:45-11:15 **TT 34** H104
CE - Quantum Impurities, Kondo Physics

10:00-13:00 **TT 36** H2053
SC - Vortex Dynamics, Vortex Phases, Pinning

10:15-12:15 **TT 37** H3027
TR - Fluctuations and Noise

11:15-13:00 **TT 35** H104
CE - Quantum Critical Phenomena

Mitgliederversammlung des Fachverbands Tiefe Temperaturen

Di 18:30–19:45 TU H2053

Tagesordnung

1. Frühjahrstagung 2005, Statistik
2. Themenkreise
3. Frühjahrstagung 2006, Termine, HV, Symposien
4. Neuwahl des Fachverbandsvorsitzenden TT
5. Verschiedenes