



Superconductivity Seminar

Summer Term 2015

This seminar takes place on Mondays, 16:15 in the library of the Atominstitut, Stadionallee 2.

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|----------------|--|
| 16. March 2015 | Christian Wurz
Change of superconducting properties in Ba-122 single crystals following fast neutron irradiation |
| 23. March 2015 | Tatiana Prikhna
Recent results on high-pressure synthesized MgB₂ |
| 30. March 2015 | !!! Sondertermin !!!
Thomas Baumgartner, Johannes Hecher
Presentations to be held on the MRS 2015 spring meeting |
| 29. April 2015 | !!! Sondertermin !!!
Takanobu Kiss (to be confirmed)
Homogeneity of coated conductors |
| 4. May 2015 | Michael Eisterer
Radiation effects on superconducting magnet materials |
| 18. May 2014 | Daniel Kagerbauer
Patterning of coated conductors for high J_c measurements |
| 1. June 2015 | Mayraluna Lao
Micro Hall scan measurements on coated conductors |
| 22. June 2015 | Johannes Hecher
Overcoming granularity effects in iron-based superconductors |
| 29. June 2015 | Rainer Prokopec
Mechanical properties of candidate insulation materials for future LHC magnets |



Superconductivity Seminar

Summer Term 2014

This seminar takes place on Mondays, 16:15 in the library of the Atominstitut, Stadionallee 2.

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|----------------|--|
| 3. March 2014 | Mayraluna Lao
Advanced measurements on coated conductors |
| 10. March 2014 | Tatiana Prikhna
MAX phases – new nanolaminated compounds combining the best properties of metals and ceramics |
| 31. March 2014 | Johannes Hecher, Ventsislav Mishev, Wolfgang Seeböck
Presentations of the SUPERIRON Workshop |
| 5. May 2014 | Thomas Baumgartner
Effects of Fast Neutron Irradiation on State-of-the-Art Nb₃Sn Wires |
| 26. May 2014 | David Fischer
Current anisotropy in BaFe₂As₂ single crystals |
| 2. June 2014 | Martin Zehetmayer
How the macroscopic current in a superconductor correlates with the microscopic flux-line distribution |
| 16. June 2014 | Thomas Cervinka
Current transport in granular BaFe₂As₂ superconductors |
| 23. June 2014 | Alexander Hinterberger
Properties of high pressure synthesized MgB₂ |
| 30. June 2014 | Ventsislav Mishev
Flux pinning in iron-based superconductors |



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Superconductivity Seminar

Summer Term 2013

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|---------------|--|
| 18 March 2013 | Michael Eisterer
Introduction |
| 22 April 2013 | Ventsislav Mishev
Angular Resolved Magnetisation Measurements on Ba-122 Single Crystals: Effects of Neutron Irradiation |
| 29 April 2013 | Johannes Hecher, Ventsislav Mishev, Wolfgang Seeböck
SUPER-IRON Workshop Talks |
| 13 May 2013 | Masamichi Nakajima
National Institute of Advanced Industrial Science and Technology
AIST, Tsukuba, Japan
Growth and Properties of Ba-122 Single Crystals |
| 3 June 2013 | Holger Hager
Flux Penetration into Type-II Superconductors
Theory vs. Experiment |
| 10 June 2013 | Rainer Prokopec
Recent Progress in Coated Conductor Development |
| 17 June 2013 | Mayraluna Lao
Flux Pinning Contribution of Y_2O_3/Fe_2O_3
Nanoparticles in MOCVD-YBCO tapes |
| 24 June 2013 | John Durrell
University of Cambridge
High Magnetic Fields with Bulk Superconductors |



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Summer Term 2012
SUPERCONDUCTIVITY SEMINAR

(TU: 141.388, Univ.: 854 919)

Monday, 16:15

Library Atominstitut

05.3.	H.W. Weber	Introduction
19.3.	J. Hecher *	STM study of the flux line lattice in pristine and irradiated type-II superconductors
23.4.	G. Giunchi (Edison SpA, Milano)	Recent advances in the preparation of MgB ₂ superconductors by the "Reactive Liquid Infiltration" technique
04.6.	J. Emhofer	Effects of neutron irradiation beyond the ITER design limit on state-of-the-art coated conductors
11.6.	S. Singer	Simulation of defects in the flux line lattice of type-II superconductors
18.6.	F.M. Sauerzopf	Summation of pinning forces
25.6.	M. Zehetmayer	Scanning tunnelling microscopy of the flux line lattice in a superconductor

* *Beginn ausnahmsweise um 15:15!*



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Datum / Date

Summer Term 2011 SUPERCONDUCTIVITY SEMINAR

(TU: 141.388, Univ.: 854 919)

Monday, 16:15
Library Atominstitut

07.3.	H.W. Weber	Introduction
04.4.	V. Mishev	Critical current anisotropy of coated conductors under tensile stress
11.4.	R. Flükiger (CERN)	Enhanced connectivity and critical current density in densified <i>in situ</i> MgB ₂ wires
02.5.	H. Fillunger / R.K. Maix	Design of a superconducting magnet system for investigations of neutron decays
09.5.	R. Prokopec	Status of the ITER TF coil insulation
16.5.	F. Köchl	Modeling of JET and ITER discharges with the JET suite of transport codes
23.5.	M. Zehetmayer	Presentation of the scanning probe microscope at ATI
06.6.	A. Vostner (ITER)	Status of the ITER conductor production
20.6.	F.M. Sauerzopf	Importance of dislocations in the vortex lattice
27.6.	M. Küblböck	Design of a cryogenic scanning Hall-probe microscope



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Summer Term 2010 SUPERCONDUCTIVITY SEMINAR

(TU: 141.388, Univ.: 854 919)

Monday, 16:15
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|-------|--|---|
| 01.3. | H. W. Weber | Introduction |
| 08.3. | J. Pedarnig (JK Univ. Linz) | Deposition, ion modification, and J_c characterization of YBCO based thin films |
| 12.4. | H. Fillunger | Axial mechanical stiffness of the ITER TF conductors |
| 19.4. | E. Pardo | AC magnetization process in coated conductors and Roebel cables |
| 26.4. | V. Mishev | Application of magneto-optical imaging for the characterization of coated conductors |
| | M. Chudy | Presentation in Slovakia: HTS for fusion magnets – influence of neutron irradiation |
| 17.5. | J. Emhofer | Characterization of coated conductors – Roebel tapes |
| 31.5. | R. Gonzalez-Arrabal (CIEMAT Madrid) | Development of materials for fusion applications: the problem of gas bubble formation |
| 07.6. | E. Pardo / F.M. Sauerzopf / M. Eisterer | CIMTEC Presentations / Braunschweig Presentation |
| 21.6. | C. Trauner | Radiation effects on V_3Si single crystals |



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Datum / Date

Summer Term 2009

SUPERCONDUCTIVITY SEMINAR

(TU: 141.388, Univ.: 854 919)

Monday, 16:15

Library of the Atomic Institute

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|-------|-----------------------------------|---|
| 09.3. | H. W. Weber | Introduction |
| 16.3. | M. Zehetmayer | A short introduction to a new project on "Vortex matter properties of superconducting materials" |
| 20.4. | J. Emhofer | Advanced analysis of 2 nd generation coated conductors for use in fusion magnets |
| 27.4. | F.M. Sauerzopf | Statistical summation of strong pinning forces |
| 11.5. | T. Withnell | Recent developments of the 6 T split-coil transport current measurement system |
| 18.5. | F. Hengstberger | Superconducting thin films in small applied fields |
| 25.5. | J. Karpinski (ETH Zurich) | Single crystals of $\text{LnFeAsO}_{1-x}\text{F}_x$ (Ln=La, Pr, Nd, Sm, Gd) and $\text{Ba}_{1-x}\text{Rb}_x\text{Fe}_2\text{As}_2$: growth, structure and superconducting properties |
| 08.6. | A. Kortyka | Superconducting state anisotropy and lock-in effect in low-level Pr-doped $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ |
| 15.6. | A. Vostner (F4E Barcelona) | Results of the European ITER TF conductor qualification samples |



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Summer Term 2008

SUPERCONDUCTIVITY SEMINAR

(TU: 141.388, Univ.: 854 919)

Monday, 16:15

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|-------|---|--|
| 03.3. | F. Hengstberger / R. Fuger | HIPERCHEM presentations |
| 10.3. | H. W. Weber / F. Sauerzopf | Introduction |
| 31.3. | T. Prikhna (Institute for Superhard Materials, Kiev) | Nano-structural MgB ₂ - and YBCO-based materials with high critical currents |
| 28.4. | R. Fuger | Neutron irradiation of industrial YBCO tapes |
| 05.5. | Physik-Kolloquium – TU | No lecture at ATI |
| 19.5. | V. Mishev | Low temperature STM of the mixed state |
| 26.5. | Univ. Wien 17:00 Kutschera | No lecture at ATI |
| 02.6. | G. Burkhart (CERN-TU) | Key components of a dilution refrigerator |
| 09.6. | A. Kortyka | Influence of different rare earth elements on the superconducting properties of RE-123 single crystals |
| 16.6. | F. Hengstberger | Critical currents in YBCO films and coated conductors |