

Dielectric Solids Division Fachverband Dielektrische Festkörper (DF)

Elisabeth Soergel
Physikalisches Institut - Universität Bonn
Nussallee 12 - 53115 Bonn
soergel@uni-bonn.de

Overview of Invited Talks and Sessions

(Lecture rooms WIL B321 and GER 37; Poster P1C)

Invited Talks

DF 3.1	Mon	9:30–10:00	WIL B321	Controlling core-shell formation in BNT-ST — •TILL FRÖMLING, AZATUHI AYRIKYAN, MATIAS ACOSTA, LEOPOLDO MOLINA-LUNA, MICHAEL DÜRRSCHNABEL, HANS-JOACHIM KLEEBE, HERBERT HUTTER, KYLE WEBBER
DF 3.2	Mon	10:00–10:30	WIL B321	Determining fundamental properties from diffraction: Electric field induced strain and piezoelectric coefficient — •MANUEL HINTERSTEIN, MARKUS HOELZEL, ANDREW STUDER, MICHAEL J. HOFFMANN
DF 3.7	Mon	12:30–13:00	WIL B321	Ferroic glasses: polar nanoregions in relaxor PMN vs. magnetic nanoparticles in a discontinuous multilayer — •WOLFGANG KLEEMANN
DF 7.1	Tue	9:30–10:00	GER 37	Synthesis of large-area single-crystal diamond by heteroepitaxy for application as dielectric window material — •MATTHIAS SCHRECK, STEFAN GSELL, MARTIN FISCHER
DF 7.3	Tue	10:20–10:50	GER 37	Design, materials composition and manufacturing of components for advanced modular gyrotron prototypes — •SEBASTIAN RUESS, GAETANO AIELLO, GERD GANTENBEIN, TOMASZ RZESNICKI, THEO SCHERER, DIRK STRAUSS, MANFRED THUMM, JÖRG WEGGEN, JOHN JELONNEK
DF 7.4	Tue	11:10–11:40	GER 37	Dielectric diamond window for the ITER EC H&CD Upper Launcher: design, analysis and qualification — •GAETANO AIELLO, MARIO GAGLIARDI, GIOVANNI GROSSETTI, FRANCESCO MAZZOCCHI, ANDREAS MEIER, GABRIELLA SAIBENE, SABINE SCHRECK, PETER SPAEH, DIRK STRAUSS, ALESSANDRO VACCARO, THEO SCHERER
DF 8.1	Tue	9:30–10:00	WIL B321	Room temperature skyrmions and robust metastable skyrmion states in $\text{Co}_8\text{Zn}_8\text{Mn}_4$ — •JONATHAN WHITE, KOSUKE KARUBE, NICOLE REYNOLDS, JORGE GAVILANO, HIROSHI OIKE, AKIKO KIKKAWA, FUMITAKA KAGAWA, YUSUKE TOKUNAGA, HENRIK RONNOW, YOSHINORI TOKURA, YASUJIRO TAGUCHI
DF 10.1	Wed	9:30–10:00	GER 37	Mobile electronic excitations studied by ultrafast spectroscopy — •STEFAN LOCHBRUNNER, FRANZISKA FENNEL, STEFFEN WOLTER, TIM VÖLZER
DF 10.3	Wed	10:20–10:50	GER 37	Time-resolved characterization of photoactive materials using terahertz spectroscopy — •RAINER EICHBERGER
DF 10.4	Wed	11:10–11:40	GER 37	Theoretical simulations of pump-probe spectroscopies in solids — •MICHAEL SENTEF
DF 10.6	Wed	12:00–12:30	GER 37	Accessing micro- and mesoscopic ultrafast electron dynamics in low-dimensional materials — MICHELE PUPPIN, CHRISTOPHER NICHOLSON, MELANIE MÜLLER, ROMAN BERTONI, HANNES HÜBENER, ANGEL RUBIO, CLAUDE MONNEY, CEPHISE CACHO, MARTIN WOLF, ALEXANDER PAARMANN, LAURENZ RETTIG, •RALPH ERNSTORFER
DF 11.1	Wed	9:30–10:00	WIL B321	Implications of domain evolution during the growth of ferroelectric superlattices — RUI LIU, BENJAMIN BEIN, HSIANG-CHUN HSING, ANNA GURA, MOHAMMED HUMED YUSUF, GIULIA BERTINO, JIN-WEN LAI, •MATTHEW DAWBER

DF 11.9	Wed	12:15–12:45	WIL B321	The electro-caloric effect in BaTiO₃ from first principles — ●CLAUDE EDERER
DF 15.1	Wed	15:00–15:30	WIL B321	Domain and fluctuation dynamics in magnetoelectric multiferroics — ●JOACHIM HEMBERGER
DF 17.1	Thu	9:30–10:00	WIL B321	Magnetic and orbital excitations in the multiferroic skyrmion host GaV₄S₈ — DIETER EHLERS, ZHE WANG, HANS-ALBRECHT KRUG VON NIDDA, VLADIMIR TSURKAN, PETER LUNKENHEIMER, ISTVAN KÉZSMÁRKI, IOANNIS STASINOPOULOS, DIRK GRUNDLER, ●ALOIS LOIDL
DF 17.9	Thu	12:15–12:45	WIL B321	Role of charged defects on conduction and dynamics of domain walls in BiFeO₃ — ●TADEJ ROJAC, ANDREJA BENCAN, GORAN DRAZIC, NAONORI SAKOMOTO, HANA URSIC, BOSTIAN JANCAR, GASPER TAVCAR, MAJA MAKAROVIC, JULIAN WALKER, BARBARA MALIC, DRAGAN DAM-JANOVIC

Tutorials

DF 1.1	Sun	16:00–16:50	HSZ 304	Introduction to ferroic materials — ●CLAUDE EDERER
DF 1.2	Sun	16:50–17:40	HSZ 304	Skyrmions with ferroelectric polarization in multiferroic lacunar spinels — ●ALOIS LOIDL
DF 1.3	Sun	17:40–18:30	HSZ 304	Skyrmions in magnetic materials — ●JONATHAN WHITE

Invited talks of the joint symposium SYCE

See SYCE for the full program of the symposium.

SYCE 1.1	Mon	15:00–15:30	HSZ 02	Ferroelectric domain walls: from conductors to insulators and back again — ●PETRO MAKSYMOVYCH
SYCE 1.2	Mon	15:30–16:00	HSZ 02	Zoology of skyrmions and the role of magnetic anisotropy in the stability of skyrmions — ●ISTVAN KEZSMARKI, SANDOR BORDACS, JONATHAN WHITE, VLADIMIR TSURKAN, ALOIS LOIDL, PETER MILDE, HIROYUKI NAKAMURA, ANDREY LEONOV
SYCE 1.3	Mon	16:00–16:30	HSZ 02	Magnetic imaging of topological phenomena in ferroic materials — ●WEIDA WU
SYCE 1.4	Mon	17:00–17:30	HSZ 02	Topological skyrmion textures in chiral magnets — ●MARKUS GARST
SYCE 1.5	Mon	17:30–18:00	HSZ 02	Learning through ferroelectric domain dynamics in solidstate synapses — SÖREN BOYN, GWENDAL LECERF, STÉPHANE FUSIL, SYLVAIN SAÏGHI, AGNÈS BARTHÉLÉMY, JULIE GROLLIER, VINCENT GARCIA, ●MANUEL BIBES

Invited talks of the joint symposium SYNS

See SYNS for the full program of the symposium.

SYNS 1.1	Wed	15:00–15:30	HSZ 02	The Limits to Lithography: How Electron-Beams Interact with Materials at the Smallest Length Scales — ●KARL K. BERGGREN
SYNS 1.2	Wed	15:30–16:00	HSZ 02	High precision fabrication for light management at nanoscale — ●SAULIUS JUODKAZIS, ARMANDAS BALCYTIS
SYNS 1.3	Wed	16:00–16:30	HSZ 02	Directed self-assembly of performance materials — ●PAUL NEALEY
SYNS 1.4	Wed	16:45–17:15	HSZ 02	Nanometer accurate topography patterning using thermal Scanning Probe Lithography — ●ARMIN W. KNOLL
SYNS 1.5	Wed	17:15–17:45	HSZ 02	High resolution 3D nanoimprint lithography — ●HARTMUT HILLMER

Invited talks of the joint symposium SYBM

See SYBM for the full program of the symposium.

SYBM 1.1	Tue	9:30–10:00	HSZ 02	New twists in biological photonics: circular polarisation and beyond. — ●PETE VUKUSIC, LUKE McDONALD, EWAN FINLAYSON
SYBM 1.2	Tue	10:00–10:30	HSZ 02	Bio-inspired materials and structures for technology and architecture — ●THOMAS SPECK

SYBM 1.3	Tue	10:30–11:00	HSZ 02	Cellulose bio-inspired hierarchical structures — ●SILVIA VIGNOLINI
SYBM 1.4	Tue	11:15–11:45	HSZ 02	Strong Flexible Bioenabled Nanocomposites for Sustainable Sensing — ●VLADIMIR TSUKURUK
SYBM 1.5	Tue	11:45–12:15	HSZ 02	3D laser nano-printing of rationally designed materials — ●MARTIN WEGENER

Sessions

DF 1.1–1.3	Sun	16:00–18:30	HSZ 304	Tutorial: Ferroics and Skyrmions
DF 2.1–2.8	Mon	9:30–12:30	GER 37	Various Topics I
DF 3.1–3.7	Mon	9:30–13:00	WIL B321	Focus: Ferroics with Mesoscopic Order
DF 4.1–4.1	Mon	14:00–14:45	HSZ 01	PV V - Ramamoorthy Ramesh
DF 5.1–5.5	Mon	15:00–18:00	HSZ 02	SYCE - Novel Functionality and Topology-Driven Phenomena in Ferroics and Correlated Electron Systems (DF with MA, KR, MI, TT and DS)
DF 6.1–6.5	Tue	9:30–12:15	HSZ 02	SYBM - Bioinspired Functional Materials: From Nature's Nanoarchitectures to Nanofabricated Designs (CPP with BP, MM, DF, DY und MI)
DF 7.1–7.6	Tue	9:30–12:20	GER 37	Focus: Microwave and THz Properties, Developments and Applications of Dielectric Materials
DF 8.1–8.13	Tue	9:30–13:30	WIL B321	Ferroics - Domains, Domain Walls and Skyrmions I
DF 9.1–9.33	Tue	14:00–16:00	P1C	Poster Session
DF 10.1–10.6	Wed	9:30–12:30	GER 37	Focus: Spatio-Temporal Multiscale Optical Spectroscopy Meets Functional Materials (DF with O, CPP)
DF 11.1–11.10	Wed	9:30–13:00	WIL B321	Ferroics - Domains, Domain Walls and Skyrmions II
DF 12.1–12.1	Wed	13:15–13:45	HSZ 01	PV XV - Dennis Meier
DF 13.1–13.5	Wed	15:00–17:45	HSZ 02	SYNS - Symposium Nanostructuring Beyond Conventional Lithography (MI with DS, DF, HL, MM and VA)
DF 14.1–14.8	Wed	15:00–18:00	GER 37	Various Topics II
DF 15.1–15.8	Wed	15:00–17:30	WIL B321	Ferroics - Domains, Domain Walls and Skyrmions III
DF 16.1–16.6	Wed	18:00–20:00	P4	Crystallography - Poster Session (KR with DF)
DF 17.1–17.12	Thu	9:30–13:30	WIL B321	Ferroics - Domains, Domain Walls and Skyrmions IV
DF 18.1–18.8	Thu	15:00–17:15	WIL B321	Multiferroics (DF and MA)
DF 19.1–19.9	Fri	10:00–12:30	ZEU 118	Glasses and Glass Transition (CPP with DF)

Annual General Meeting of the Dielectric Solids Division

Mittwoch 18:00–19:00 GER 37

- Bericht
- Zukunft des Fachverbandes "Dielektrische Festkörper"
- Wahlen & Abstimmungen
- Verschiedenes