

T. Jungwirth

Crystal symmetries and transport phenomena in antiferromagnets

L. Smejkal

Electronic Structure of Crystal Hall Antiferromagnets

J. Mackel

Topological defects in ferroics: Searching for skyrmions in magnetic thin films and ferroelectric single crystals

P. Zubko

Nanoscale domains in metal-ferroelectric heterostructures

F. Araoka

*Electrical-frustration induced topological defects in nematics:
topological defect array and dynamic solitons*

A. Saxena

*Merons, skyrmions and tubular structures in chiral magnets and
liquid crystals*

P. Jizba

TUTORIAL 1: Introduction to homotopy theory

P. Jizba

TUTORIAL 2 : Introduction to solitons and instantons

M. G. Vergniory

Introducing Topological Quantum Chemistry for materials search and applications

K. Shapovalov

Bistable interfacial polarization and ferroelectricity in SrTiO₃

M. Mochizuki

Microwave-driven dynamics of magnetic skyrmions

I. I. Smalyukh

Knotland

S. Kralj

Classical nematic liquid crystal analogues of Majorana particles

H. N. Lee

*Interfacial control of noncollinear spin structures in 3d-5d
quantum heterostructures*

group photo

B. Braun

Dynamical skyrmions and emergent electromagnetism of moving monopoles in nanostructures

C. Pfliegerer

Topological magnetic order far from equilibrium

J. Seidel

Topological structures as nanoscale functional elements

A. Grunebohm

Functional bubble domains in ferroelectric superlattices

R. Rivers

Testing causality in defect production in annular junctions and superconductors

C. A. Heikes

The interplay of polar structure, superconductivity, and topology in Weyl semimetal MoTe_2

F. N. Rybakov

Hopfions in magnets and superconductors

Short introduction of poster contributions

V. P. Kravchuk

Nonlinear dynamics of skyrmion strings

O. Gomonay

Antiferromagnetic skyrmion: spin eigen-modes and current-induced dynamics

M. Klaui

Topological dynamics - ultrafast spin manipulation for novel memory and thermal diffusion for unconventional logic devices

I. Kezsmarki

Switching between Neel- and Bloch-type skyrmions in lacunar spinels

R. L. Dally

Probing skyrmion dynamics with SANS in GaV_4S_8

S. Ghara

Conducting domain walls in the orbital-order driven polar state of lacunar spinels

T. Ono

Vanishing skyrmion Hall effect in ferrimagnet

L. Eng

Identifying the novel Skyrmion phase in Cu_2OSeO_3 by Magnetic-Force-Microscopy

A. Loidl

MnCr₂S₄: a multiferroic spin supersolid

S. M. Griffin

Doubling up the topological order in hexagonal manganites

S. Coh

Phonons with angular momentum in systems with broken symmetries

C. Lichtensteiger

Tuning of the depolarization field, built-in voltage and nanodomain structure in ferroelectric thin films

B. Kirbus

Real-time and in-situ probing of first- and second-order phase transitions of BaTiO₃ domain walls through 3D Cherenkov SHG

C. Weymann

Domain configuration and microstructure in ferroelectric ultrathin films

S. Cherifi Hertel

SHG imaging of nontrivial polarization textures at and close to ferroelectric domain walls

E. K. H. Salje

Domain glass phenomena

W. Schranz

Dynamic phase transitions in ferroelastic systems with randomly pinned domain walls

M. Stengel

New functionalities from gradients: Flexoelectricity and more

T. W. Noh

Ferroelectrically tunable magnetic skyrmions in ultrathin oxide heterostructures

V. Ya. Shur

Growth of dendrite domains and superfast domain shape transformation in ferroelectrics

A. R. Akhmatkhanov

Transition from 2D to 1D domain growth in KTP with surface dielectric layer

G. Catalan

Metal-insulator phase boundaries in VO_2 films

L.Q. Chen

*Computational Understanding and Prediction of Polar States in
Ferroelectric Heterostructures Using Phase-field Method*

To be announced

V. A. Stoica

Optical creation of a supercrystal with three-dimensional nanoscale periodicity

W. Peng

Relaxor-like ferroelectricity in BaTiO₃ films via epitaxial symmetry engineering

I. Lukyanchuk

Topology of ferroelectrics at the nanoscale: negative and supercapacitance, multivalued logic, and knotting

O. A. Tretiakov

Magnetic bimerons as skyrmion analogues in in-plane magnets

H. Wen

Ultrafast structural dynamics of ferroelectric domains and vortices

M. A. P. Goncalves

Second-principles studies of topological textures in ferroelectrics

R. Ramesh

Observation of room temperature polar skyrmions

P1 – P. Baláž

An analytic approach to static properties and current-induced magnetization dynamics of pinned 90° domain wall

P2 – S. Damerio

Control of magnetism in CaFe_2O_4 thin films

P3 – K. C. Erb

Symmetry guide to phase transitions with vectorlike order parameters

P4 – C. A. Heikes

Engineering the ferroic order of BiFeO_3 through electrostatic engineering

P5 – J. Hlinka

Where to look for ferroelectric skyrmion lattices

P6 – S. Kamba

Static and dynamic magnetoelectric coupling in hexaferrites with conical magnetic structures

P7 – L. D. Kulish

Investigation of magnetic properties of frustrated layered oxides ABO_2 ($A = \text{Na}, \text{K}; M = \text{Cr}, \text{Mn}$)

P8 – E. Lysne

Topological Defects in Helimagnetic FeGe

P9 – J. Mangeri

Multiferroic order parameters of GaV_4Se_8 across the Jahn–Teller manifold

P10 – P. Márton

First-principles-based Landau–Devonshire potential for ferroelectrics

P11 – P. Ondrejko

Topological defects within ferroelectric Bloch walls

P12 – M. Paściak

THz dynamics in vortex-antivortex superlattices

P13 – J. Pisljar

Half-skyrmion lattices in thin layers of blue phase liquid crystals

P14 – N. Podoliak

Striped textures of the aligned non-chiral liquid crystals in Smectic A phase

P15 – V. Stepkova

Ising lines: natural topological defects within ferroelectric Bloch walls

P16 – J. Vít

All-optical magnetoelectric memory