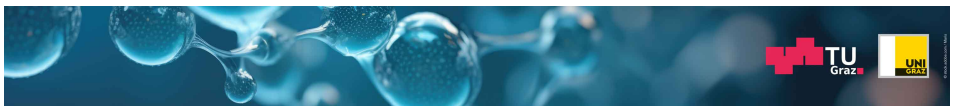
ÖPG-CMD Joint Meeting 2026



Report of Contributions

https://indico.global/e/16918

Contribution ID: **1** Type: **not specified**

OePG Plenary

Monday, September 21, 2026 10:00 AM (1 hour)

Session Classification: CMD Plenary

Track Classification: Other: Other

Contribution ID: **3** Type: **not specified**

Talk 1

Monday, September 21, 2026 11:00 AM (20 minutes)

Session Classification: Parallel

Track Classification: Mini-Colloquia: M03 - Correlated Materials Out of Equilibrium

Contribution ID: **4** Type: **not specified**

Talk 1

Monday, September 21, 2026 11:20 AM (20 minutes)

Session Classification: Parallel

Contribution ID: **5** Type: **not specified**

Talk 1

Monday, September 21, 2026 11:40 AM (20 minutes)

Session Classification: Parallel

Contribution ID: **6** Type: **not specified**

Talk 1

Monday, September 21, 2026 11:00 AM (20 minutes)

Session Classification: Parallel

Contribution ID: **7** Type: **not specified**

Talk 1

Monday, September 21, 2026 11:00 AM (20 minutes)

Session Classification: Parallel

Contribution ID: **8** Type: **not specified**

Talk 1

Monday, September 21, 2026 11:00 AM (20 minutes)

Session Classification: Parallel

Contribution ID: **9** Type: **not specified**

Talk 1

Monday, September 21, 2026 11:00 AM (20 minutes)

Session Classification: Parallel

Contribution ID: **10** Type: **not specified**

Title Title Title

Abstract Abstract $\int_{-\infty}^{\infty} dx\, e^{-x^2} f(x)$ Abstract

Author: EICHMANN, Gernot

Co-authors: Prof. HUSTERMANN, Hax; Prof. LUSTERMANN, Lax

Presenter: EICHMANN, Gernot

Session Classification: Parallel

Track Classification: OePG: FAKT: Nuclear and Particle Physics

Contribution ID: **11** Type: **not specified**

Hall coefficient signals orbital differentiation in the Hund's metal Sr_2RuO_4

Tuesday, September 22, 2026 10:30 AM (20 minutes)

The Hall coefficient R_H of Sr_2RuO_4 exhibits a non-monotonic temperature dependence with two sign reversals. We show that this puzzling behavior is the signature of two crossovers, which are key to the physics of this material. The increase of RH and the first sign change upon cooling are associated with a crossover into a regime of coherent quasiparticles with strong orbital differentiation of the inelastic scattering rates. The eventual decrease and the second sign change at lower temperature are driven by the crossover from inelastic to impurity-dominated scattering. This qualitative picture is supported by quantitative calculations of $R_H(T)$ using the Boltzmann transport theory in combination with dynamical mean-field theory, taking into account the effect of spin–orbit coupling. Our insights shed new light on the temperature dependence of the Hall coefficient in materials with strong orbital differentiation, as observed in Hund's metals.

Author: AICHHORN, Markus (Graz University of Technology)

Co-authors: GEORGES, Antoine (Center for Computational Quantum Physics, Flatiron Institute, 162 5th Avenue, New York, NY 10010, USA, Collège de France, 11 place Marcelin Berthelot, 75005 Paris, France); MRAVLJE, Jernej (Jozef Stefan Institute)

Presenter: AICHHORN, Markus (Graz University of Technology)

Session Classification: Session X

Track Classification: Mini-Colloquia: M02 - Heavy quasiparticles in strongly correlated materials

Contribution ID: **12** Type: **not specified**

About Different Approaches to ˆ3He + Cu_2(bdc)_2dabco

Tuesday, September 22, 2026 10:50 AM (20 minutes)

Hier eine einfache Formel:

E \underset{Einstein}{=} m \cdot cˆ2
\underset{Pythagoras}{=} m \cdot (aˆ2 + bˆ2)

Author: RESEL, Roland (Institute of Solid State Physics)

Co-author: HOLY, Vaclav

Presenter: RESEL, Roland (Institute of Solid State Physics)

Session Classification: Session X

Track Classification: OePG / CMD: Plenary / Semi-Plenary

Contribution ID: **15** Type: **not specified**

Test

Tuesday, September 22, 2026 11:10 AM (20 minutes)

Test text

Author: WEISS, Thomas (Univerisity of Graz)

Co-author: Prof. MUSTERMANN, Max (Universität Graz; Universität Stuttgart)

Presenter: WEISS, Thomas (Univerisity of Graz)

Session Classification: Session X

Track Classification: OePG / CMD: Plenary / Semi-Plenary

Contribution ID: **16** Type: **not specified**

Title Title Title

Tuesday, September 22, 2026 11:30 AM (20 minutes)

Abstract Abstract Abstract

Authors: MORRICONE, Ennio (Affiliation 1, Affiliation 2); EICHMANN, Gernot; LEONE, Sergio (Affiliation 3, Affiliation 4)

Presenter: EICHMANN, Gernot

Session Classification: Session X

Track Classification: Mini-Colloquia: M01 - Electron correlations and phonons in quantum materials

Contribution ID: **17** Type: **not specified**

asdf

Tuesday, September 22, 2026 10:30 AM (20 minutes)

asdf

Author: EICHMANN, Gernot

Presenter: EICHMANN, Gernot

Session Classification: Mini-Colloquium

Track Classification: OePG / CMD: Plenary / Semi-Plenary

Contribution ID: **18** Type: **not specified**

sdfg

Tuesday, September 22, 2026 10:50 AM (20 minutes)

sdfg

Author: EICHMANN, Gernot

Presenter: EICHMANN, Gernot

Session Classification: Mini-Colloquium

Track Classification: OePG: FAKT: Nuclear and Particle Physics

Contribution ID: **19** Type: **not specified**

Talk XX-1

Session Classification: Session X

Contribution ID: **20** Type: **not specified**

Test $\int_{-\infty} dxe^x$

aaa

Author: EICHMANN, Gernot

Presenter: EICHMANN, Gernot

Contribution ID: **21** Type: **not specified**

aaa

Wednesday, September 23, 2026 8:00 AM (2 hours)

Session Classification: Mini-Colloquium

Contribution ID: **22** Type: **not specified**

Deracemization in 1,1'- Binaphthyl Thin Films Studied by Electronic Circular Dichroism

1,1'-binaphthyl (BINAPH) is an axially chiral molecule that crystallizes in either a racemic phase, consisting of an equal number of both enantiomers in the unit cell or in a chiral phase where only one type of enantiomer is present. Thin film crystallization of BINAPH are strongly influenced by the presence of a solid substrate, where selective adsorption at the substrate–liquid interface promotes heterogeneous nucleation and complete chiral phase formation. This study further explores the deracemization of BINAPH through the influence of a chiral additive, 1,1'-bi-2-naphthol (BINOL). Structural characterization by Grazing Incidence XRD using synchrotron radiation confirms that thin films prepared by solution processing crystallize preferentially in the chiral phase of BINAPH. The extent of deracemization and enantioselectivity is further investigated using electronic circular dichroism (ECD). For the first time, the solid-state ECD spectra of BINAPH thin films are recorded using conventional ECD spectrometer and synchrotron-based Mueller Matrix Polarimetry (MMP). Since conventional ECD measurements cannot resolve intrinsic ECD from linear anisotropies such as linear dichroism and birefringence, spatially resolved Mueller matrix polarimetry is employed to accurately extract true solid-state ECD. MMP mapping on the thin film samples reveals localized chiroptical responses within the 1,1'-binaphthyl thin films, providing direct insight into enantioselective crystallization and spatially resolved chiral purity.

Author: RESEL, Roland (Institute of Solid State Physics, GRaz University of Technology, Austria)

Co-authors: JAMES, Ann Maria (Institute of Solid State Physics, Graz University of Technology, Austria); DANIEL, Bastian (Institute of Molecular Biosciences, University of Graz, Austria); SILIGARDI, Giuliano (B23 Beamline, Diamond Light Source, Harwell Science & Innovation Campus, Didcot, Oxfordshire, UK.); JOHN, Sanjay (Institute of Solid State Physics, Graz University of Technology, Austria); GIANGA, Tiberiu-Marius (B23 Beamline, Diamond Light Source, Harwell Science & Innovation Campus, Didcot, Oxfordshire, UK.); GEERTS, Yves H. (Laboratoire de Chimie des Polymères, Faculté des Sciences, Université Libre de Bruxelles (ULB), Bruxelles, Belgium.)

Presenter: RESEL, Roland (Institute of Solid State Physics, GRaz University of Technology, Austria)

Contribution ID: **23** Type: **not specified**

aaa

Thursday, September 24, 2026 2:30 PM (30 minutes)

Session Classification: CMD Semi-Plenary

Contribution ID: **24** Type: **not specified**

bbb

Thursday, September 24, 2026 3:00 PM (30 minutes)

Session Classification: CMD Semi-Plenary