

Towards Comprehension of Chiral Induced Spin Selectivity

775. WE-Heraeus-Seminar

05 - 08 December 2022

at the Physikzentrum Bad Honnef/Germany

**WILHELM UND ELSE
HERAEUS-STIFTUNG**



Program (CET)

Sunday, 04 December 2022

17:00 – 21:00 ARRIVAL and REGISTRATION

18:30 *BUFFET SUPPER*

Monday, 05 December 2022

07:30 *BREAKFAST*

08:30 – 09:30 Ron Naaman **Why It Is Difficult to Understand the Mechanism of the CISS Effect?**

09:30 – 10:30 Helmut Zacharias **Chirality Induced Spin Selectivity: The Photoelectron View**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 12:00 Yonatan Dubi **The “Spinterface” Model for the CISS Effect – Connecting Theory and Experiment**

12:00 – 13:00 Vladimiro Mujica **Field-Mediated Chirality Information Transfer and Dispersion Intermolecular Forces**

13:00 – 13:15 **Conference Photo (outside at the main entrance)**

13:15 – 14:30 *LUNCH BREAK*

Program (CET)

14:30 – 15:30	José Lorenzo Alonso Gomez	Ad Hoc Chiroptical Systems through Synthesis
15:30 – 16:30	Solmar Varela	The Chiral-Induced Spin Selectivity Effect and the Chiro-Optical Activity of a Helix
16:30 – 17:00	<i>COFFEE BREAK</i>	
17:00 – 18:00	Mayra Peralta	Electron and Spin-phonon Interaction in DNA: A Minimum Analytical Model
18:00 – 19:00	Tianhan Liu (ONLINE)	Control of Chirality, Spin, and Orbital in Chiral Molecular Semiconductor Junctions
19:00 – 20:30	<i>DINNER</i>	
20:30	Poster Flash Presentation	

Program (CET)

Tuesday, 06 December 2022

07:30	<i>BREAKFAST</i>	
08:30 - 09:30	David Waldeck	CISS and Electrocatalysis
09:30 - 10:30	Narcis Avarvari	CISS Effect with Helicene and Tetrathiafulvalene Derivatives
10:30 - 11:00	<i>COFFEE BREAK</i>	
11:00 - 12:00	Ora Entin-Wohlman	Spin-orbit Active Weak Links
12:00 - 13:00	Hiroshi Yamamoto	Symmetry Considerations on the CISS Effect
13:00 - 14:30	<i>LUNCH BREAK</i>	
14:30 - 15:30	Binghai Yan	Spin Polarizer, Electric Magneto-Chiral Anisotropy, and Higher-order Magnetoresistance in CISS
15:30 - 16:30	Per Hedegård	CISS and Equilibrium Spin Currents
16:30 - 17:00	<i>COFFEE BREAK</i>	
17:00 - 19:00	Poster Session	
19:00	<i>DINNER</i>	

Program (CET)

Wednesday, 07 December 2022

07:30	<i>BREAKFAST</i>	
08:30 – 09:30	Magalí Lingenfelder	Chiral Molecular Layers: A New Twist for Clean Energy
09:30 – 10:30	Amparo Ruiz Carretero	The CISS Effect in Next Generation Organic Photovoltaics
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 12:00	Jean-Philippe Ansermet	Magnetic Resonance Characterization of the CISS Effect
12:00 – 13:00	Giovanni Cuniberti	Model- and First-principle Based Investigations of Chiral Molecules and the CISS Effect
13:00 – 13:15	Stefan Jorda (ONLINE)	About the Wilhelm and Else Heraeus Foundation
13:15 – 14:30	<i>LUNCH BREAK</i>	
14:30	Excursion	
18:30	<i>HERAEUS DINNER</i> at the Physikzentrum (cold & warm buffet, with complimentary drinks)	

Program (CET)

Thursday, 08 December 2022

07:30	<i>BREAKFAST</i>	
08:30 – 09:30	Yossi Paltiel	Chiral Spintronics
09:30 – 10:30	Clarice Aiello	From Nanotech to Living Sensors: Unraveling the Spin Physics of Biosensing at the Nanoscale
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 12:00	Best Poster Prizes	
12:00 – 13:00	Concluding Remarks	
13:00	<i>LUNCH</i>	

End of Seminar / Departure