

Israeli-German WE-Heraeus-Seminar: Unifying Aspects of Topology in Quantum and Classical Systems

27 October – 1 November 2026

at the Physikzentrum Bad Honnef, Germany

**WILHELM UND ELSE
HERAEUS-STIFTUNG**



Program

Tuesday, 27 October 2026

17:00 – 21:00 Registration

18:30 – 20:00 *BUFFET SUPPER*

Program

Wednesday, 28 October 2026

07:30 – 08:45 *BREAKFAST*

08:45 – 08:50 Scientific Organizers **Opening remarks**

08:50 – 09:00 Stefan Jorda **About the Wilhelm and Else Heraeus Foundation**

09:00 – 09:45 Katharina Franke **Wave-function engineering of Yu-Shiba-Rusinov states from magnetic atoms and molecules on superconductors**

09:45 – 10:30 Barbara Dietz-Pilatus **Graphene Billiards Subject to the Haldane Model**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Or Swartzberg **Statistics of Zero-Energy Conical Intersections in Chiral Random-Matrix Fields**

11:45 – 12:30 Roser Valenti **Correlations and topology in twisted bilayer graphene**

12:30 – 14:00 *LUNCH*

14:00 – 14:45 Oded Agam **Stochastic Morphodynamics in Hydra Regeneration**

14:45 – 15:30 Michael Wilkinson **Dislocation Mediated Diffusion and the Endoplasmic Reticulum**

15:30 – 16:00 *COFFEE BREAK*

Program

Wednesday, 28 October 2026

16:00 – 16:45	Netanel Lindner	Probing Topological Order through the Phase Diagram
16:45 – 17:30	Mikael C. Rechtsman	Quantized Nonlinear Thouless Pumping
17:30 – 18:15	Masahito Ueda	Harnessing Nonequilibrium Open Quantum Systems
18:30 – 20:00	<i>DINNER</i>	

Program

Thursday, 29 October 2026

08:00 – 09:00 *BREAKFAST*

09:00 – 09:45 Martin Zirnbauer **Comments on the “Tenfold Way”**

09:45 – 10:30 Ram Band **Can one color the shape of a
(Kohmoto) butterfly?**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Anwesha Chakraborty **Average Entanglement Entropy in Non-Abelian Quantum Systems**

11:45 – 12:30 Karol Życzkowski **Strongly entangled multipartite states:
a topological approach**

12:30 – 12:35 *CONFERENCE PHOTO*

12:35 – 14:00 *LUNCH*

14:00 – 14:45 Roni Ilan **Zeros as indicators of non-trivial
topology, and
where to find them**

14:45 – 15:30 Alexander Altland **Anderson localization on expanding
geometries**

15:30 – 16:00 *COFFEE BREAK*

16:00 – 18:30 **Poster Session**

18:30 – 20:00 *DINNER*

Program

Friday, 30 October 2026

08:00 – 09:00 *BREAKFAST*

09:00 – 09:45 Erez Zohar **Gauging, Disentangling and Dualities**

09:45 – 10:30 Yonatan Anahory **Evidence of competing orders in few-layer NbSe₂**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Budhaditya Bhattacharjee **Beyond Gaussianity**

11:45 – 12:30 Gernot Akemann **Various regimes of non-Hermiticity: Fluctuations and dissipative spectral form factor**

12:30 – 14:00 *LUNCH*

14:00 – 14:45 Nir Davidson **Complex bands and topology with coupled lasers**

14:45 – 15:30 Maciej Lewenstein **Why photons? A psychoanalytic portrait of a scientist as a mature man**

15:30 – 16:00 *COFFEE BREAK*

16:00 – 18:30 **Excursion**

18:30 – 20:00 *HERAEUS CONFERENCE DINNER*
(social event with cold & warm buffet with complimentary drinks)

Program

Saturday, 31 October 2026

08:00 – 09:00 *BREAKFAST*

09:00 – 09:45 Jacobus Verbaarschot **Topology, Spontaneous Symmetry Breaking and Anti-Unitary Symmetries**

09:45 – 10:30 Hermann Schulz-Baldes **News about the spectral localizer**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Maria Azhar **Beyond Integer Topology: Continuous Connections Between Skyrmions and Hopfions**

11:45 – 12:30 Dganit Meidan **Topological entanglement transitions under partial post-selected monitoring**

12:30 – 14:00 *LUNCH*

14:00 – 14:45 Harald Giessen **Discovery of phonon-polaritonic skyrmions: Transition from bubble- to Néel-type**

14:45 – 15:30 Frank Meyer zu Heringdorf **Linking extended vector wave fields with momentum space topology**

15:30 – 16:00 *COFFEE BREAK*

16:00 – 16:45 Gregory Berkolaiko **Topology of the Ritz energy landscape**

16:45 – 17:30 Eugene Kanzieper **Local Level Spacings and the Inspection Paradox in Random Matrix Theory**

17:30 – 18:15 Mario Kieburg **Winding Number Statistics for Non-Gaussian Random Fields**

18:30 – 20:00 *DINNER*

Program

Sunday, 1 November 2026

08:00 – 09:00 *BREAKFAST*

09:00 – 09:45 Joshua Feinberg **Flowing to Normality and the Fate of the Single Ring Theorem**

09:45 – 10:30 Uzy Smilansky **The Lyapunov exponent of a quantum Hamiltonian – graph and ergodic theoretical approach**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Boris Gutkin **Chern number in quantum graphs**

11:45 – 12:30 Ulrich Kuhl **Bound states in the continuum induced via local symmetries in complex structures**

12:30 – 14:00 *LUNCH*

End of the seminar and departure