IAS Retreat 2025

See below for the program of the Junior Researchers Event on 22 May.

27 May 2025

Main Event

Forschungszentrum Jülich, central library (building 04.7)

Time	Sessions	Meetings
08:30-	Registration & Welcome Coffee	
09:00	Foyer	
09:00-	Welcome Address	
09:10	Lecture Hall, Chair: Sonja Grün	
	Ulf G. Meißner, IAS Managing Director	
	Laurens Kuipers, Member of the Board of Directors (VS-I)	
09:10-	Presentations of the Institute Divisions, Part I	
11:00	Lecture Hall, Chair: Marisol Ripoll	
	IAS-2	
	Minimal Physical Modeling of Living Systems - Thorsten Auth, Jens Elgeti	
	IAS-4	
	Nuclear Lattice Effective Field Theory in a Nutshell - Fabian Hildenbrand	
	Engineering Topological Phases in Quantum Nanosystems - Lin Wang	
	IAS-6	
	Introduction to IAS-6 - Sonja Grün	
	Physics of AI - Moritz Helias	
	IAS-7	
	Shaping the Future of Crowd Safety: From Flames to Footsteps - Lukas Arnold and Mohcine Chraibi	
	IAS-8	
	Retrieval of Sun-Induced Plant Fluorescence from Hyperspectral Imagery - Jim Buffat	
	Galaxy Morphology Classification with Counterfactual Explanation	
	- Zhuo Cao	
11:00-	Coffee Break & Group Photo	
11:30	Foyer	
11:30-	Spotlight Talks, Part I	Scientific
11:50	Lecture Hall, Chair: Abigail Morrison	Support
	Exascale Computing for Skyrmion Simulations - Nihad Abuawwad (#1)	Meeting
	Supercomputing in a Browser - Easy access to WebTools for	(30-60 min)
	Increased Productivity - Jens Henrik Goebbert, Tim Kreuzer (#43)	Room 338
	Hadron Physics with the Jülich-Bonn Model: Determining the Light	
	Baryon Resonance Spectrum - Oleh Luniachek, Deborah Ronchen, Christian Schneider (#65)	
	Vortex Formation and Odd Viscosity in a Chiral Active Fluid - Joscha Mecke (#69)	
	Combining Socio-Psychological Pedestrian Dynamics with Al and Simulation Tools - Ezel Üsten (#97)	
11:50-	Poster Session, Part I (odd numbers)	
12:40	Foyer	
12:40-	Lunch	
13:40	Foyer	

	,	
13:40-	Presentations of the Institute Divisions, Part II	
15:30	Lecture Hall, Chair: Erenus Yildiz	
	IAS-9	
	Materials Data Science and Informatics - Stefan Sandfeld	
	JSC	
	The Futures of Computing at JSC - Robert Speck	
	INM-9	
	Computational Biomedicine - Developing and Using Molecular	
	Simulation, Machine Learning, and Bioinformatics Tools to	
	Investigate Neurotransmission in the Human Brain - Giulia	
	Rossetti	
	PGI-1	
	An IAS Perspective on the Peter Grünberg Institut 1 - Quantum	
	Theory of Materials - Gregor Michalicek	
	PGI-15	
4 = 60	Neuromorphic Principles for Self-Attention - Emre Neftci	
15:30-	Spotlight Talks, Part II	
15:50	Lecture Hall, Chair: Vania Calandrini	
	Leveraging LLMs and Ontologies for Simulation Data Extraction and	
	Exploration - Elaheh Akhoundi (#2)	
	Event-Driven Eligibility Propagation: Combining Efficiency with	
	Biological Realism - Agnes Korcsak-Gorzo (#56)	
	Cognitive Maps in Brains and Machines - Sven Krausse; Alpha Renner	
	(#60)	
	Summation Compression for Very Low-Rank Adaptation - Alessio	
15:50-	Quercia (#84)	
16:40	Poster Session, Part II (even numbers)	
	Foyer Character Street	
16:40- 16:50	Short Break	
	Foyer	
16:50-	Large Research Projects and Infrastructures	
17:50	Lecture Hall, Chair: Robert Speck	
	JUPITER - Pushing Technical and Scientific Boundaries to the	
	Exascale Level - Benedikt von St. Vieth	
	Better Software Better Research - Claire Wyatt	
	Fostering Interdisciplinarity: The Jülich Neuromorphic Computing	
	Alliance - Abigail Morrison	
	Rhine-Ruhr Center for Scientific Data Literacy - An Introduction and Recent Activities - Katharina Immel	
	Helmholtz Al Consulting - supporting Al innovation in Helmholtz -	
17:50-	Stefan Kesselheim Closing Remarks, Report from the Junior Investigators Event	
17:50-	Closing Remarks, Report from the Junior Investigators Event	
10.00	& Poster Prize	
	Lecture Hall	
40-45	Tom Luu, Sonja Grün, Katharina Immel	Osmis ::
18:15-		Senior
19:15		Investigators
		Meeting
		Foyer

Senior Investigators Meeting

A meeting of senior investigators (i.e. senior postdocs, team leaders, group leaders, directors, ...) to get to know each other and exchange ideas and perspectives on, among others, cooperation within the IAS, leadership matters, and communication.

Scientific Support Meeting (from 11:30 with open end)

An informal get-together of those IAS members supporting scientific activities at the IAS (i.e. secretaries, coordinators, IT staff, ...).

IAS Retreat 2025 Junior Researchers Event, 22 May 2025

11:00 Welcome (Seecasino, room: Hambach) Have a coffee and get pumped for the event.

11:15 Speed Meeting (Hambach)

Meet other early career researchers from IAS in a "speed dating" fashion while enjoying a walk on campus.

12:15 Lunch & Researcher Services and Support Fair (Hambach)

Enjoy a light lunch while getting to know the different services, support structures and funding schemes that FZJ and RWTH offer you. Take the opportunity to bring your CV and cover letters and receive professional feedback.

14:00 Career Path Panel (Building 14.6 (PTJ), room: 241) Meet the following professionals and ask them all your career-related questions:

- Junior Prof. Dr. Jun Huang, ERC Starting Grant recipient at IET-3
- Dr.-Ing. Hatim Djelassi, Systems Engineer at ZEISS Semiconductor **Manufacturing**
- Dr. rer. nat. Anna Thünen, Scientific Consultant at d-fine
- Dr. rer. nat. Michael von Papen, Lead Consultant Digital Sustainability at comma soft
- Dr. Tracy Warbrick, Head of Education & Scientific Communication at **Brain Products GmbH**

15:45 Closing & Feedback (Building 14.6 (PTJ), room: 241) Let us know how you liked the event and what to do next time.















