

Programme of the 17th BESSY@HZB User Meeting on 3/4 December 2025

Country of Honour 2025: Niger

DAY 1	03 December 2025 (Wednesday)	
12:00 - 17:00	Vendor Exhibition (all-day alongside the meeting)	WISTA Center
12:00 - 13:00	Registration	WISTA Foyer
13:00 - 14:50	Synchrotron Session (Chair: Holger Stillrich)	Bunsen-Hall
13:00 - 13:10	Bernd Rech - Welcome to the BESSY@HZB User Meeting 2025	
13:10 - 13:25	Antje Vollmer - News from BESSY II and BESSY II+	
13:25 - 13:40	BESSY II Instrument Scientists - New Instruments in User Operation BerLUXS - BElChem - PRESTO - ENERGIZE - ROCK-IT	
13:40 - 13:55	Markus Ries - Operation and Development of BESSY II and MLS	
13:55 - 14:10	Andreas Jankowiak - BESSY III	
14:10 - 14:25	Yan Lu - Battery Village	
14:25 - 14:40	Cormac Mc Guinness (Trinity College Dublin, Ireland) The European Synchrotron and FEL User Organisation (ESUO)	
14:40 - 14:50	Discussion	
14:50 - 15:20	Coffee Break	WISTA Foyer
15:20 - 16:35	Science Highlights Part I - QM & Magnetism (Chair: Alevtina Smekhova)	Bunsen-Hall
15:20 - 15:40	Aleix Barrera (Institut de Ciència de Materials de Barcelona, ICMA-B-CSIC, Spain) On-Chip Planar Magnetic Flux Concentrators for Magnetic Sensors and Limited-Field Magnetic Imaging	
15:40 - 16:00	Olivier Boulle (Spintec, Grenoble, France) Electrical manipulation of skyrmions in synthetic antiferromagnet and magnetic tunnel junctions	
16:00 - 16:20	Tauqir Shinwari (Paul-Drude-Institut für Festkörperelektronik, Germany) Above-Room-Temperature Ferromagnetism in Large Scale Epitaxial Fe ₃ GaTe ₂ / Graphene van der Waals Heterostructures	
16:20 - 16:35	Oliver Rader (Helmholtz-Zentrum Berlin, Germany) Outlook: BESSY III for Quantum Materials	
16:35 - 17:00	Coffee Break	WISTA Foyer
17:00 - 18:00	Bestowal of Prizes (EEK Prize & Innovation Award)	Bunsen-Hall
18:00 - 18:15	Technical Break	
18:15 - 19:00	Public Lecture	Bunsen-Hall
	Frédéric Safa and Marcos Bavdaž (European Space Agency, Directorate of Science, Netherlands) ESA's NewAthena X-Ray Space Observatory	
19:00 - 21:00	SNACKS & BEER	WISTA Foyer

DAY 2	04 December 2025 (Thursday)	
09:00 - 14:00	Vendor Exhibition (all-day alongside the meeting)	WISTA Center
09:15 - 09:45	Keynote Lecture (Chair: Catalina E. Jimenez)	Bunsen-Hall
	Michelle Browne (Helmholtz-Zentrum Berlin, Germany) The Wonderful World of MXenes for Green H ₂ Production	
09:45 - 11:00	Science Highlights Part II - Energy Materials & Catalysis (Chair: Catalina E. Jimenez)	Bunsen-Hall
09:45 - 10:05	Fabian Jeschull (Karlsruhe Institute of Technology (KIT), Germany) Why Half-Cell Samples Provide Limited Insight Into the Aging Mechanisms of Potassium Batteries	
10:05 - 10:25	Felix Lang (Universität Potsdam, Germany) "Moon Photovoltaics" utilizing Lunar Regolith and Halide Perovskites	
10:25 - 10:45	Pinar Sakoglu (Helmholtz-Zentrum Berlin, Germany) Unravelling the Role of Mn Promotion for the Chemical Structure and Surface Evolution of Co(0001) Model Catalysts for Fischer-Tropsch Synthesis	
10:45 - 11:00	Renske van der Veen (Helmholtz-Zentrum Berlin, Germany) Outlook: BESSY III for Energy Materials and Catalysis	
11:00 - 11:30	Coffee Break	WISTA Foyer
11:30 - 12:25	Science Highlights Part III - Life Science (Chair: Manfred Weiss)	Bunsen-Hall
11:30 - 11:50	Bernhard Loll (Freie Universität Berlin, Germany) Computational and structure-based design of the diterpene cyclooctatenol synthase CotB2 as part of a biotechnological platform	
11:50 - 12:10	Andrea Thorn (Helmholtz-Zentrum Berlin, Germany) AI-based and Visual Diagnostics for Macromolecular X-Ray Diffraction: AUSPEX	
12:10 - 12:20	Outlook: BESSY III and AI options	
12:20 - 13:30	Lunch Break	Canteens on-site
13:30 - 14:30	Young Scientists Session (Chair: Ioanna Mantouvalou)	Bunsen-Hall
13:30 - 13:45	Shima Farhoosh (Freie Universität Berlin, Germany) Reaction Kinetics in Cobalt-based Electrocatalysts for Water Oxidation	
13:45 - 14:00	Leopold Lahn (Helmholtz-Zentrum Berlin, Germany) Effect of Ionic Liquids on Electrochemical Properties and the Electronic Structure of NiPt Alloys in Alkaline Media	
14:00 - 14:15	Deeksha Gupta (Helmholtz-Zentrum Berlin, Germany) Tuning ultrafast demagnetization with ultrashort spin polarized currents in multi-sublattice ferrimagnets	
14:15 - 14:30	Jakob Ruickoldt (Universität Potsdam, Germany) X-ray crystallography of the CODH/ACS complex	
14:30 - 14:50	Presentations from the Country of Honour 2025	Bunsen-Hall
	Abdou Latif Bonkaney and Abdoukadi Ayoub Mahamane (Abdou-Moumouni University Niamey, Niger)	
14:50 - 15:20	Bestowal of the KFS Early Career Photon Science Award 2025	
15:20 - 15:25	Acknowledgements	
15:25 - 15:30	Technical Break - Change of Location to BESSY II	
15:30 - 17:00	Market Place of Innovations	Lecture Hall
16:30 - 17:00	Poster Mounting (Storage ring operation suspended 16:00 - 21:00)	Experimental Hall
17:00 - 19:00	Poster Session	Experimental Hall
from 19:00	Green Buffet	Foyer