

Conference Programme, Abstracts and Index

SUNDAY 12th April

If you booked an on-campus accommodation and arrive on Sunday, please go to the Information Centre (in Square 3) – people there will direct you to the right place to check in.

MONDAY 13th April

12:00	Registration Opening	EBS
13:00 – 15:00	Lunch 1 Coffee & Posters 1	Packed lunch will be served at EBS foyer Posters will be in EBS 2.65 and EBS 2.66
Session 1 (15:20 – 17:30), chaired by Jeanine Grüne: Conference opening, JEOL talks		EBS 2.2
15:20 – 15:30	Dimitri Svistunenko	Opening Remarks
15:30 – 15:50	Michael Wasielewski	S1_1 : Molecular Diradical Spin Qubits in a Crystalline Host as a Platform for Quantum Sensing
15:50 – 16:10	Lorenzo Catini	S1_2 : JEOL talk: Exploring spin-dependent processes in organic solar cells by Electrically Detected Magnetic Resonance
16:10 – 16:30	Sarah Chapman	S1_3 : JEOL talk: A Rapid EPR–LC MS Workflow for Unmasking Hidden Radical Pathways in Complex Photochemical Reactions
16:30 – 16:50	Orit Nir-Arad	S1_4 : JEOL talk: EPR at NMR Magnetic Fields: Insights into P1-DNP in Diamonds
16:50 – 17:10	Daniel Selby	S1_5 : JEOL talk: Optical Dynamic Nuclear Polarisation in Solution-state Magnetic Resonance
17:10 – 17:30	Julian Stropp	S1_6 : JEOL talk: Enhanced sensitivity and reduced spectral overlap in ENDOR spectroscopy with frequency-swept RF and MW pulses
Evening		
18:00 – 21:00	Dinner 1, followed by JEOL reception	EBS foyer

TUESDAY 14th April

8:45 – 9:00	Morning coffee/tea/fruit	EBS foyer
Session 2 (9:00 – 10:40), chaired by Janet Lovett		EBS 2.2
9:00 – 9:40	Plenary 1: Brian Crane	S2_1 : In cell Flavoprotein Photoreduction as a Probe of Molecular Structure and Cellular Environment
9:40 – 10:00	Sergius Boschmann	S2_2 : Distinct Valence States in Minimal FeFe-Hydrogenases
10:00 – 10:20	Gabriela Ionita	S2_3 : Studying neutrophil elastase activity using peptide chain-functionalized radicals by EPR spectroscopy
10:20 – 10:40	Katrin Ackermann	S2_4 : Validating a predicted unusual fold in a major streptococcal virulence protein – towards deciphering host-pathogen interactions inducing rheumatic heart disease
10:40 – 11:10	Coffee & Posters 2	EBS foyer, EBS 2.65 and EBS 2.66
Session 3 (11:10 – 12:35), chaired by Adam Brookfield: Poster presentations and sponsors' talks		EBS 2.2
11:10 – 11:40	FLASH POSTERS	
11:40 – 12:00	Jingwen Xia	S3_1 : CIQTEK : Next-Generation EPR: Combining High-Performance Q Band Instrumentation with Artificial Intelligence Enhanced Spectral Processing
12:00 – 12:20	Timothy Keller	S3_2 : Bruker : Broadband and Selective Inversion of Electron Spins
12:20 – 12:35	Austin Gamble Jarvi	S3_3 : High Q Technologies : Applications of EPR to Biopharma: Structure, Dynamics, and Equilibria of a Monomer-Dimer System by Pulsed Dipolar Spectroscopy
12:35 – 14:00	Lunch 2	Silberrad

Session 4 (14:00 – 15:30), chaired by Paul Jonsen			EBS 2.2
14:00 – 14:30	Invited 1: David Britt	S4_1 : mm-Wave (263 GHz) high power pulse EPR spectrometer and applications to high spin transition metal centers	
14:30 – 14:50	Gediminas Usevičius	S4_2 : Spiraling down: Versatile ESR using superconducting microresonator	
14:50 – 15:10	Ilia Kaminker	S4_3 : Measuring Electron Spin Dynamics under Magic Angle Spinning at 7 T on Hundreds of Microsecond Timescale	
15:10 – 15:30	Marvin Lenjer	S4_4 : Mims Electron-Nuclear Double Resonance (ENDOR) with microwave chirp pulses	
15:30 – 16:00	Coffee & Posters 3	EBS foyer, EBS 2.65 and EBS 2.66	
Session 5 (16:00 – 17:10), chaired by Alex Shread: Bruker Thesis talk			EBS 2.2
16:00 – 16:10	Marina Bennati (online transmission)	Bruker Thesis Prize Laudation	
16:10 – 17:10	Annemarie Kehl	S5_1 : Development of Analysis- and Simulation-Routines for ENDOR Spectroscopy	
Evening			
18:30 – 22:00	Dinner 2, followed by drink reception and social evening	Silberrad	

WEDNESDAY 15th April

8:45 – 9:00	Morning coffee/tea/fruit	EBS foyer	
Session 6 (9:00 – 10:40), chaired by Alice Bowen			EBS 2.2
9:00 – 9:40	Plenary 2: Marilena Di Valentin	S6_1 : Generation and transfer of long-lived electron spin polarization in chromophore-nitroxide molecular rulers	
9:40 – 10:00	Hannah Eckvahl	S6_2 : Detection of the Chirality Induced Spin Selectivity Effect in Achiral Donor Acceptor Molecules	
10:00 – 10:20	Christian Teutloff	S6_3 : Optically Tunable Spin-Spin Interactions in Diarylethene-Linked Porphyrin Architectures	
10:20 – 10:40	Sebastian Michler	S6_4 : EPR Spectroscopic Analysis of Pore Environments in Covalent Organic Frameworks by Dynamic Spin Probe Exchange	
10:40 – 11:10	Coffee & Posters 4	EBS foyer, EBS 2.65 and EBS 2.66	
Session 7 (11:10 – 12:40), chaired by Enrico Salvadori			EBS 2.2
11:10 – 11:40	Invited 2: Sofie Cambré	S7_1 : Integration of triplet electron spin qubits in carbon nanotubes	
11:40 – 12:00	Soyoung Oh	S7_2 : Quantum Sensing in N@C60 Molecular Spin Systems	
12:00 – 12:20	Samara Medina Rivero	S7_3 : Magnetic Resonance Toolkit for Diradical Molecular Qubits	
12:20 – 12:40	Fabio Donati	S7_4 : All-electrical Coherent Control of a Single 4f Electron Spin	
12:40 – 14:00	Lunch 3	Silberrad	
Free afternoon			
What can I do in Colchester and area? See some recommendations in the Conference book.			
Bruker Lecture ceremony (17:30 – 18:40)			Ivor Crewe lecture hall
17:30 – 17:40	Gunnar Jeschke	Bruker Prize Laudation	
17:40 – 18:40	Christiane Timmel Bruker Prize Talk	Bruker Prize : Excerpts from Our Travel Diary: Finding Our Bearings with Spin, Light, and Magnetic Compasses	
Evening			
19:00 – 23:00	Dinner 3 (BBQ) Followed by Bruker Reception	Outside / Inside the Silberrad	

THURSDAY 16th April

8:45 – 9:00	Morning coffee/tea/fruit	EBS foyer
Session 8 (9:00 – 10:40), chaired by Emma Richards		EBS 2.2
9:00 – 9:40	Plenary 3: Eric McInnes	S8_1 : Magnetic Resonance Studies of Paramagnetic Rotaxanes
9:40 – 10:00	Gunnar Jeschke	S8_2 : Interrogating catalysts at work with continuous microwave irradiation
10:00 – 10:20	Lisa Ebo	S8_3 : SET – driven radical formation in nitroaromatics
10:20 – 10:40	Anatolii Vereshchagin	S8_4 : Following redox processes in organic batteries by <i>in situ</i> EPR
10:40 – 11:10	Coffee & Posters 5	EBS foyer, EBS 2.65 and EBS 2.66
Session 9 (11:10 – 13:00), chaired by Marilena di Valentin		EBS 2.2
11:10 – 11:40	Invited 3: Claudia Avalos	S9_1 : Predicting J-mediated Enhanced Intersystem Crossing in Chromophore-Radical Systems
11:40 – 12:00	Jeannine Grüne	S9_2 : Spin-Dependent Pathways in Singlet Fission: The Role of High-Spin States in Luminescence
12:00 – 12:20	Naitik Panjwani	S9_3 : Excitation Energy and Structural Control of Spin-State Formation in Singlet Fission
12:20 – 12:40	Enrico Salvadori	S9_4 : Magnetic Properties of Surface-Bound ns ¹ Species
12:40 – 13:00	Daniel Reta	S9_5 : Unlocking Nitroaromatic Radicals: Characterisation & Reactivity
13:00 – 14:30	Lunch 4	Silberrad
Session 10 (14:30 – 15:50), chaired by Bela Bode		EBS 2.2
14:30 – 15:10	Plenary 4: Hannah Shafaat	S10_1 : Investigating structure-function relationships in spin-coupled metallo-protein clusters using pulsed EPR spectroscopy
15:10 – 15:30	Jonathon Clark	S10_2 : Investigating Key Radical Intermediates in Rhenium Based Photocatalytic CO ₂ Reduction
15:30 – 15:50	Nicole Höfer	S10_3 : Underestimation of Gadolinium-Based Contrast Agent Retention and Gadolinium Transchelation by Magnetic Resonance Techniques
15:50 – 16:30	Coffee & Posters 6	EBS foyer, EBS 2.65 and EBS 2.66
Session 11 (16:30 – 17:25), chaired by Eric McInnes		EBS 2.2
16:30 – 17:00	Invited 4: Alberto Collauto	S11_1 : Fast acquisition of CW-EPR spectra to improve the time resolution of film-electrochemical EPR experiments
17:00 – 17:20	Yannik Limbach	S11_2 : Probing limits of PELDOR / DEER distance measurements
17:20 – 17:25	Closing Remarks	
18:00 – 21:30	Conference Banquet	Wivenhoe House