

EFEP2025 Summer School Draft Programme:

Time	Sunday 31 /08	Monday 1/09	Tuesday 2/09	Wednesday 3/09	Thursday 4/09	Friday 5/09	Saturday 6/09
9:00 am		Basics of Electron Spin and cw EPR	Basics of Pulsed EPR	Pulsed Dipolar Spectroscopy Theory and DEER (PELDOR)	Demonstrations/tutorials Possible sessions: DEER (PELDOR), Hyperfine methods, Rapid scan/multi-harmonic, EasySpin,	AWG Pulse Shaping: Why and How	Departure
10:00 am		Intro to the spin-Hamiltonian (s-H)	Relaxation: Measurement & Mechanisms	Pulsed Dipolar Methods: RIDME, CIDME, SIFTER/DQC etc.		Application lectures: Biology, Catalysis, DNP,	
11:00 am		Morning coffee	Morning coffee	Morning coffee	Morning coffee	Morning coffee	
11:30 am		Semi-empirical Interpretation of s-H parameters	s-H: Time-Dependent Schrödinger, Density Matrix, Product Operators	Dipolar Simulation, Modelling and Analysis	Spinach, DFT (e.g. Orca), MTSL/MMM/DeerLab, Spin trapping, Multi-frequency	Quantum Information Science (QIS), photoEPR (transient and pulsed), E-chem, ODMR or EDMR	
12:30 pm		EasySpin 1: the spin system and cw EPR	Pulsed Hyperfine Spectroscopy Theory and ESEEM methods	Lab safety briefing Optional demo: pulsed set up, incl. Hahn echo, $T_{1/2}$			
1:30 pm		Lunch	Lunch	Free time	Lunch	Lunch	
2:30 pm		Instrumentation: cw	Pulsed Hyperfine Methods: ENDOR				
3:30 pm		Multi-frequency EPR	EasySpin 2: pulsed hyperfine				
4:30 pm		Afternoon tea	Afternoon tea			Afternoon tea	
5:00 pm		Computational EPR	Instrumentation: pulsed				
6:00 pm	Dinner & welcome	Dinner & posters	Dinner & posters		Dinner & posters		
7:00 pm-						Banquet	