



Program

Summer School IV (Sun 15 - Sat 21 March 2026): "Spin-Chemistry"

Youth hostel "Schloss Windischleuba", Pestalozziplatz 1, 04603 Windischleuba

Before you come:

- Try to install the program MOLSPIN from <https://molspin.eu/>.

TEACHERS

Luca Gerhards (LG) & Irina Anisimova (IA): Simulation program MOLSPIN

Gunnar Jeschke (GJ): SCRIP, CIDEP & CIDNP, mechanisms

P.K. Madhu (PKM): QM, density matrix, NV centers

Jörg Matysik (JM): Photophysics, Photochemistry & Photobiology

Georgeta Salvan (GS): Spintronics, CISS effect

Iliia Solov'yov (IS): Quantum-chemistry methods

Jonathan Woodward (JW): Magnetic-field effects, magnetoreception & Q-biology

Sunday 15 March 2026

16.00 Shuttle bus transfer from railway station "Altenburg"

18.00 Shuttle bus transfer from railway station "Altenburg"

Arrival by individual travel, check-in, registration

19.00 Dinner & Get together

20.00-20.30 JM: Opening remarks, Participants introduce each other, About the place

20.30-22.00 **Lecture 01: PKM: QM**

Monday 16 March 2026

08:00-09:00 Breakfast

09.00-10.30 **Lecture 02: PKM: Level crossings**

10.30-11.00 Coffee/tea

11.00-12.30 **Lecture 03: IS: Quantum-chemistry methods**

12.30-13.00 Lunch

13.00-14.00 Break/visit of the castle/volleyball/garden & walk

14.00-15.30 **Lecture 04: JM: Photophysics, photochemistry & photobiology**

15.30-16.00 Coffee/Tea/Cake

16.00-17.30 **Lecture 05: PKM: Density matrix**

18.00-19.00 Dinner

19.00-20.30 **Lecture 06: LG: Spin coherence & decoherence**

Afterwards: IS&LG&IS: assistance in installing MOLSPIN

Tuesday 17 March 2026

08:00-09:00 Breakfast

09.00-10.30 **Lecture 07: LG: Redfield theory**

10.30-11.00 Break
11.00-12.30 Lecture 08: GJ: SCRP, RPM, RTPM

12.30-13.00 Lunch
13.00-14.00 Break
14.00-15.30 Lecture 09: JW: Magnetic field effects
15.30-16.00 Coffee/Tea/Cake
16.00-17.30 Lecture 10: GJ: CIDEP & CIDNP in the liquid state
18.00-19.00 Dinner
19.00-20.30 Exercise 1: IS&LG&IS: MARY

Wednesday 18 March 2026

08:00-09:00 Breakfast
09:00 By coach to Altenburg
09:00-13:00 Altenburg Castle & town
13:00 Return by coach
14.00-15.30 Lecture 11: GJ: Basics of solid-state spin chemistry and spectroscopy
15.30-16.00 Coffee/Tea/Cake
16.00-17.30 Lecture 12: JW: Radiofrequency effects, RYDMR, Optical detection of Radical Pairs.
18.00-19.00 Dinner
19.00-20.30 Exercise 2: IS&LG&IS: RYDMR

Thursday 19 March 2026

08:00-09:00 Breakfast
09.00-10.30 Lecture 13: TP&GJ: DD & TSM
10.30-11.00 Break
11.00-12.30 Lecture 14: GS: Spintronics (part I)

12.30-13.00 Lunch
13.00-14.00 Break
Foto
14.00-15.30 Lecture 15: JW: Magnetoreception, CRY, LOV
15.30-16.00 Coffee/Tea/Cake
16.00-17.30 Lecture 16: GS: Spintronics (part II)
18.00-19.00 Dinner
19.00-20.30 Exercise 3: IS&LG&IS: Bloch-Wangsness-Redfield Theory

Friday 20 March 2026

08:00-09:00 Breakfast
09:00-10.30 Lecture 17: GS: CISS
10.30-11.00 Break
11.00-12.30 Lecture 18: PKM: NV centers & Q sensors

12.30-13.00 Lunch
13.00-14.00 Break
14.00-15.30 Lecture 19: JW: Open questions in spin-chemistry
15.30-16.00 Coffee/Tea/Cake
16.00-17.30 Exercise 4: IS&LG&IS: CIDNP

Feedback by students, Final remarks

19.00-21.00 Conference Dinner
Open end outside the eating room

Saturday 21 March 2026

07.30-09:30 Breakfast

10:15 Travelling home (direct bus transfer to Leipzig central station/Hbf)