

International Symposium on recent advances in NMR applications to materials

(Alpine NMR seminar)

Hirschegg 2026, Sep 11-14

Following please find the scientific program of this year's meeting. Talks are grouped roughly according to topic. Expect to have typically 20-25 minutes, plus discussion.

The meeting will take place at "Darmstädter Haus" in Hirschegg, Kleinwalsertal; all required information can be found here:

<https://www.darmstaedter-haus.tu-darmstadt.de/unserhaus/index.de.jsp>

Please read the information and recommendations on their homepage carefully. E.g., it says that dinner is at 18:30. Please arrive between 16:00 and 18:00 (latest!) on Friday, Sep 11. Evening session will begin after dinner. Morning session will begin about 9:30 after breakfast. Depending on the weather, we will decide about the afternoon hiking options on the spot.

Bring walking shoes, indoor shoes, swimming gear if you feel like it, and cash!

The following five sessions are planned, this year's title motto is "winners of the Hugo award (best novel)". Appropriate clothing is optional.

FRIDAY EVENING: THE CALCULATING STARS (MARY ROBINETTE KOWAL, 2019)

DATA, MATHS & COMPUTATION

Wolfgang Caliebe	SAXS and its Application in Science
Janez Stepisnik	Diffusive diffraction vs inverse Laplace transform in NMR studies of restricted diffusion
Sabina Haber-Pohlmeier	Water transport in porous material in the context of conservation work
Kevin Lindt	<i>Is your data FAIR?</i>

SATURDAY MORNING: NETWORK EFFECT (MARTHA WELLS, 2021)

IONS & CONDUCTIVITY

Karoli Mostis	Correlating Pore Structure Dynamics and Electronic Conduction in Carbon-Doped Cementitious Composites via Low-Field NMR
Tamás Péter Kertész	Testing geopolymer matrices for the solidification of ion-exchange resins
Mónika Kéri	Tuning aerogel morphology using water–ionic liquid binary mixtures
Vanda Papp	Geopolymers, as alternative binders for the conditioning of radioactive waste - development and characterization
Andreas Pohlmeier	NMR relaxometry and MRI of salt transport in porous media

SATURDAY EVENING: GREEN MARS (KIM STANLEY ROBINSON, 1994)

EARTH, LIFE & ENVIRONMENT

Rok Peklar	Does pulsed electric field treatment alter coffee-cherry drying? An MRI study
Ursa Mihac	NMR of coffee during drying and roasting
Elmar Fischer	Access to medical images at the university medical center Freiburg
David Nyul	Development of NMR Relaxation Methods and Their Application to the Structural Analysis of Carbon Aerogels
Elke Kossel	Marine CDR: Ocean-based methods for carbon dioxide removal

SUNDAY MORNING: THE TAINTED CUP (ROBERT JACKSON BENNETT, 2025)

GELS & SOFT POROUS MEDIA

Ales Mohoric	NMR Relaxation Dispersion in Hydrogels: From CPMG to Exchange Spectra
Ioan Ardelean	Probing the Microstructural Evolution and Hydration of Carbon Black-Modified Cement Pastes using Low-Field NMR
István Bányai	Sodium bentonite gel on the MOUSE: water diffusion and chemical exchange
Hannes Gerlach	Selective DNP/NMR relaxation measurements of emulsions
Levente Novák	Functionalized macromolecules/oligomers synthesized by thermal (poly)condensation in aprotic polar media

SUNDAY EVENING: THE STONE SKY (N K JEMISIN, 2018)

HARDWARE & HARD POROUS MEDIA

Igor Sersa	Nonlinear Spatial-Encoding Coils for Dipolar Halbach Magnets
Felix Nitsche	Melting behaviour of binary liquid mixtures in nanoporous media
Adrian Mateas	Molecular Probing through Low-Field NMR Relaxometry of Porous Reduced Graphene Oxide: Correlating Pore Hierarchy, Surface Chemistry, and Solvent-Dependent Confined Molecular Dynamics
Niklas Siebert	Relaxation of binary liquids under confinement in controlled porous glasses
Carlos Mattea	Exploring Dynamic Nuclear Polarization in Low Magnetic Field using Field Cycling