

Sunday July 1st Morning

Registration

Sunday July 1st Afternoon

VARIAN Users meeting

BRUKER Users meeting

Opening session

AMPERE Prize:	Bernhard Blümich
Raymond Andrew Prize:	Christian Degen
Russell Varian Prize:	Russell Varian Prize: Alfred Redfield

Welcome cocktail at Tarragona Roman Walls

Monday July 2nd Morning

Plenaries

Malcolm Levitt (UK)	Long-lived nuclear spin states: From small molecules in solution to orthohydrogen in fullerene cages
Wayne Hubbel USA	Protein Functional Dynamics from Site Directed Spin Labeling

Parallel Session: Biomolecules I

Volker Dötsch (D)	Structural investigation of the membrane proteins TehA
Rolf Boelens (NL)	NMR studies of ribosomal translation initiation factor IF2
Carlos Gonzalez (E)	NMR studies of unusual DNA quadruplexes
Masatsune Kainosho (JP)	The SAIL method for protein NMR spectroscopy-Optimisation of isotope labelling patterns

Parallel Session: Materials

Roderick E. Wasylshen (CA)	Interrogations of quadrupolar nuclei in solids at high applied magnetic field strengths
Igor Koptuyug (RU)	NMR Imaging and Catalysis – a Mutually Beneficial Combination
Janez Dolinsek (SI)	Quasicrystals and complex metallic alloys studied by NMR
Yaroslav Khimyak (UK)	Periodic mesoporous organosilicas with hierarchical functionality: advanced solid-state NMR studies

Monday July 2nd Afternoon

Poster session

Parallel Session: Dynamics

Christian Griesinger (D)	Sensitivity Enhancement of Methyl-TROSY Spectra by Longitudinal ¹ H Relaxation Optimization
Martin Blackledge (F)	Exploring Multiple Timescale Motions in Proteins using NMR and Molecular Simulation
Ulrich Scheler (D)	Pulsed field gradient NMR of polymers in external fields – Electrophoresis NMR and Rheological NMR

Pedro Lamosa (PL) Multi-timescale analysis of changes in protein dynamics induced by protecting osmolytes from hyperthermophiles

Parallel Session: EPR I

Dante Gatteschi (I) Magnetic Resonance of Molecular Nanomagnets
Natalia Domracheva (RU) Some interesting magnetic features of copper dendromesogenic complexes: EPR study
Sabine Van Dooslaer (BE) Analyzing highly anisotropic low-spin (HALS) ferric heme proteins using pulsed EPR
Michael John (UK) Probing proteins in the field of paramagnetic metals by chemical exchange

Plenary

Philip Grandinetti (USA) New Angles for Measuring the Chemical Shift Anisotropy of Quadrupolar Nuclei

Tuesday July 3rd Morning

Plenaries

Steve Fesik (USA) Discovery of Bcl-2 Family Inhibitors for the Treatment of Cancer
Robert G Griffin (USA) High Frequency Dynamic Nuclear Polarization: Amyloid, Membrane Proteins and Liquids

Parallel Session: Small molecules/Supramolecular Systems

Burkhard Luy (D) Gel-induced alignment: Measurement of RDCs and other anisotropic parameters
André E. Merbach (CH) Gadolinium based MRI contrast agents: from metallostars to gadofullerenes and gadonanotubes
Victoria Gomez (NL) Micro- and nano-NMR in Supramolecular Chemistry
Jose Martins (BE) Towards a solution NMR approach for the characterisation of colloidal nanocrystal dispersions using the capping ligand's point of view

Parallel Session: Hyperpolarization

Sean E. Barrett (USA) Coherence Beyond "T2": Unexpected Spin Echoes In Dipolar Solids Using Strong Pi Pulses
Eike Brunner (D) Investigation of biomolecules using xenon, hyperpolarized xenon, and other noble gases
Lars Kuhn (UK) Photo-CIDNP NMR pulse-labelling & PFG Diffusion measurements give further insight into the 6 M urea state of the ultrafast folding Trp-Cage mini-protein
Patrick Berthault (F) Biosensing Using Laser-Polarized Xenon NMR

Tuesday July 3rd afternoon

Poster session

Parallel Session: Pharmaceutical applications

Ernest Giralt (E)	NMR in Protein-Surface Recognition
Rober Konrat (A)	Direct Access to Protein Interaction Sites
Robin Harris (UK)	Solid-state NMR Studies of some Steroids & other Pharmaceutical Systems
Ernst RH van Eck (NL)	Polymorphism and migratory chiral separation of the free base of Venlafaxine

Parallel Session: Spin physics

Dieter Suter (D)	Spin as Qubits: Simulating Quantum Systems by NMR
Steffen Glaser (D)	Optimal Control of Spin Systems: Iceberg Pulses and Decoupling Sequences
Mladen Barbic (USA)	Magnetic Resonance Microscopy Lenses
Denis Marion (F)	Multiple and spontaneous "maser" bursts in a hyperpolarized spin system without intermediate population inversion (MRC Prize for promoted student presentation)

Plenary

John C. Lindon (UK)	Metabonomics Technologies and their Biomedical Applications
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Wednesday July 4th morning

Plenaries

Lewis Kay (CA)	Seeing the Invisible by Solution NMR Spectroscopy
Robert Tycko (USA)	Biomolecular Structure by Solid State NMR: New Questions and New Methods

Parallel Session: Solids I

Beat Meier (CH)	Structural and Dynamical Investigations on Amyloids and Prions
Ago Samoson (ES)	New data from high performance MAS.
Juan Lopez-Valentin (E)	Low field ¹ H-multiple quantum NMR in rubber science
Steven P. Brown (UK)	MAS NMR spin echoes: residual dipolar couplings and low-load ¹ H decoupling.

Parallel Session: Relaxation

Mikael Akke (S)	Protein folding/unfolding dynamics studied by spin relaxation dispersion experiments
Neri Niccolai (I)	Protein surface accessibility probed by solvent and paramagnetic molecules
Carol Post (USA)	Elucidation by NMR relaxation of domain-domain communication in a tandem pair of SH2 domains from Syk tyrosine kinase, a long-distance control mechanism for receptor binding

Carine van Heijenoort (F) Characterization of multiple states in human annexin 1 first domain using ¹⁵N relaxation dispersion and high pressure NMR

Wednesday July 4th afternoon

Poster session

Parallel Session: Biomolecules II

Harald Schwalbe (D) Time-resolved NMR to study RNA folding and RNA reactions
Muriel Delepierre (F) Molecular interactions between the outer membrane receptor HasR and the hemophore HasA by NMR
Mario Piccioli (I) Understanding Structure And Function Of Metalloproteins Via ¹³C Direct Detected NMR
Alexander Golovanov (UK) Isotopically-discriminated NMR: see proteins interact

Parallel Session: Solids II

Bernd Reif (D) Structure and Dynamics in MAS solid-state NMR using perdeuterated
Anja Bockmann (F) Characterization of water-protein interactions in microcrystalline proteins: the example of Crh
Thorsten Maly (USA) Solid-State NMR and EPR Investigation of an SH3 Amyloid Fibril
Natalia Pérez (D) Description of the Dynamics in an Organic Self-assembled Pore containing Water Clusters by Solid State NMR

Plenary

Kurt Wüthrich (USA/CH) APSI NMR in Protein Structural Biology and Structural Genomics

Thursday July 5th morning

Plenaries

Arno P.M. Kentgens (NL) NMR Spectroscopy in Tiny RF-Coils and Huge Magnets
Paul Callaghan (NZ) Multi-dimensional approaches to Pulsed Gradient Spin Echo and Relaxation NMR

Parallel Session: Imaging

Rolf Gruetter (CH) New perspectives for metabolic and molecular imaging in a multimodal world
Federico Casanova (D) Single-sided NMR spectroscopy
Luisa Ciobanu (USA) Microcoil design and applications: microimaging, high throughput NMR and chemical reaction monitoring
Gil Navon (IL) New insights into Biological Tissues Using DQF NMR and Spectroscopic MRI

Parallel Session: Frontiers

Michael Romalis (USA)	Direct optical detection of NMR in common liquids
Graham Smith (UK)	Bringing the NMR paradigm to ESR
Fridrikh Dzheparov (RU)	Beta-NMR and nuclear diffusion in space disordered subsystem
Peter Blümler (D)	Use the force! Force-free, hinged magnet arrangement for portable MRI and EPR

Thursday July 5th afternoon

Poster session

Parallel Session: Optimized NMR Acquisition

Ray Freeman (UK)	Hyperdimensional NMR spectroscopy
Marin Billeter (S)	Automated protein NMR assignments from multi-way decomposition of spectra with coupled evolution periods
Paul Schanda (F)	Novel tools for fast multidimensional protein NMR: from fast resonance assignment to real-time studies of protein kinetics
Maayan Gal (IL)	Progress in UltraFast acquisition nD NMR spectra (MRC Prize for promoted student presentation)

Parallel Session: EPR COST Session

Daniella Goldfarb (IL)	Nuclear polarization and the dominant depolarization mechanism at 95 GHz
Gunnar Jeschke (D)	Coarse-grained models of macromolecules derived from distance measurements by pulsed EPR
Martina Huber (NL)	Distance determination in the nm-range by a pulsed EPR method: The distance between a native cofactor and a spin label in an electron-transfer protein
Bela Bode (D)	Counting the monomers in nanometer-sized oligomers by PELDOR (MRC Prize for promoted student presentation)

Closing session

Conference dinner

Friday July 6th

Satellite meetings

II Iberoamerican NMR meeting

COST P15 WS "Electron-Nuclear Interactions"

EU-NMR WS "New NMR pulse sequences for proteins, nucleic acids and protonless NMR"