

Symposium on ultra-high-field NMR

IMEC, campus cité scientifique, Villeneuve d'Ascq

25th June 2025

Scientific and organizing committee: François-Xavier Cantrelle (BSI, Univ. Lille), Bertrand Doumert (IMEC, Villeneuve d'Ascq), Franck Fayon (CEMHTI, CNRS, Orléans), Olivier Lafon (UCCS, Univ. Lille), Isabelle Landrieu (BSI, CNRS, Lille), Danielle Laurencin (ICGM, CNRS, Montpellier), Françoise Ochsenbein (I2BC, CEA, Saclay), Julien Trébosc (IMEC, Villeneuve d'Ascq), Carine van Heijenoort (ICSN, CNRS, Gif-sur-Yvette)

8:45 am	Welcoming – Coffee	
9:15 am	Jean-Pierre Simorre DAS CNRS Chemistry Olivier Colot Vice-president for research, Univ. Lille	Opening statement
9:25 am	Carine van Heijenoort Director INFRANALYTICS	Presentation of Infranalytics
9:35 am	Christophe Copéret Dep. of Chemistry and Applied Biosc., ETH Zürich	NMR parameters for structure refinement
10:05 am	François-Xavier Theillet CiTCoM, CNRS, Paris	Disordered proteins at ultra-high field: ¹³ C-detection back on the scene
10:25 am	Christel Gervais LCMCP, Sorbonne Univ., Paris	High field ¹⁷ O ssNMR combined with DFT calculations: a useful tool for the characterization of structure and dynamics in hybrid materials
10:45 am	Coffee break	
11:10 am	Isabella Felli Univ. Florence	Decoding protein order and disorder by NMR: insights from ¹ H and ¹³ C direct detection
11:40 am	Davy Sinnaeve BSI, CNRS, Lille	Ultra-selective and ultra-high resolution methods: the synergy with ultra-high fields
12:00 pm	Lauriane Lecoq MMSB, CNRS, Lyon	Hepatitis B virus capsid and its interactions studied by high field solid-state NMR
12:20 pm	Patrick Wikus Bruker	From Concept to Coil: Engineering the 1.2 GHz NMR Magnets
12:50 pm	Lunch	
1:40 pm	Isabella Felli, Robert W. Schurko, Olivier Lafon Univ. Florence, NHMFL, Univ. Lille	Round table
2:20 pm	Guido Pintacuda CRMN, CNRS, Lyon	Probing Structural Dynamics of Membrane Proteins <i>In Situ</i> with Fast MAS and Ultra-High-Field NMR

2:40 pm	Laurent Delevoye UCCS, CNRS, Lille	1.2 GHz NMR observation of quadrupolar nuclei in catalysts and advanced materials
3:00 pm	Andreas Schlundt BMRZ, Goethe Univ. Frankfurt	Understanding the specificity of RNA-protein interactions in gene regulation using NMR-centered high-resolution methodology
3:30 pm	Coffee break	
3:55 pm	Alia Alia Leiden Institute of Chemistry, Leiden Univ.	Magnetic Resonance Microimaging of Zebrafish at 28.2 T (1.2 GHz)
4:25 pm	Steven P. Brown Univ. Warwick	Perspectives for Solid-State NMR at 1+ GHz: Case Studies from Applications to Pharmaceuticals and Plant Cell Walls
4:55 pm	Pierre Florian CEMHTI, Orléans	Resolution or sensitivity? Contributions of high fields NMR to material science
5:15 pm	Robert W. Schurko NHMFL, Tallahassee	Do Nuclei Dream of GHz-Class Magnets?
5:45 pm	Conclusions	