

## “ Computation of NMR properties ”

INSTN CEA Saclay, November 13-17, 2017

- An introduction to NMR physics
- Principles of NMR spectroscopy in liquids and solids
- NMR interactions – NMR parameters
- Principles of NMR simulations
- First-principles, Density Functional Theory (DFT)
- Quantum chemistry for NMR of molecular systems
- DFT-GIPAW: NMR parameters using plane wave DFT
- GIPAW in NMR crystallography
- GIPAW, NMR of quadrupolar nuclei
- Molecular dynamics
- Disordered solids
- Ab-initio simulations for MRI
- Amorphous solids - Glasses
- Perspectives in solids, GIPAW methods
- Perspectives in molecular systems

- M.H. LEVITT**, University of Southampton, U.K.  
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**N. GIRAUD**, University Paris-Saclay, UPSUD, France  
**J.N. DUMEZ**, CNRS, Gif-sur-Yvette, France  
**J.D. GALE**, Curtin University, Australia  
**A. AUER**, Max Planck Institute, Germany  
**A. P. SEITSONEN**, ENS France  
**C. MARTINEAU**, University Paris-Saclay, UVSQ, France  
**F. FAYON**, CNRS, CEMTHI, France  
**M. SALANNE**, Maison de la Simulation, France  
**J.V. HANNA**, University of Warwick, U.K.  
**R. POLLET**, CEA – IRAMIS, Saclay, France  
**T. CHARPENTIER**, CEA – IRAMIS, Saclay, France  
**J.V. HANNA**, University of Warwick, U.K.  
**J.D. GALE**, Curtin University, Australia

### Computer sessions using relevant software:

- Simulation of NMR spectra **J.N. DUMEZ, C. MARTINEAU, T. CHARPENTIER & N. GIRAUD**
- Computation of NMR parameters – Molecular systems **J.P. DOGNON, T. CHARPENTIER & A. AUER**
- Computation of NMR parameters – DFT GIPAW **A.P. SEITSONEN, T. CHARPENTIER, C. MARTINEAU & F. FAYON**
- Disorderd systems **A.P. SEITSONEN, T. CHARPENTIER, C. MARTINEAU & F. FAYON**

### Organizers:

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**Registration deadline: October 16, 2017**

**On-line Registration: [www.mse-chair.org](http://www.mse-chair.org)**



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