

Mardi 28 juin, 18h30 – 19h30

Accueil des participants

Mardi 28 juin, 19h30 –

Cocktail de bienvenue - Repas

Mercredi 29 juin, 8h25 – 8h30

Ouverture du colloque

Mercredi 29 juin, 8h30 – 10h30

Session d'oraux OM1

Croissance et Applications

OM1-1 : Intégration de nanostructures magnétiques par magnétophorèse pour applications MEMS

Ilona Lecerf, Antoine Gonon, Thierry Ondarçuhu, José Elías Angulo-Cervera, Fabrice Mathieu, David Bourrier, Liviu Nicu, Thierry Leïchlé, Thomas Blon, Lise-Marie Lacroix

OM1-2 : Proximity effects between Cr₂Te₃ vdW ferromagnet and 2D materials

Quentin Guillet, Hervé Boukari, Libor Vojacek, Céline Vergnaud, Alain Marty, Frédéric Bonell, Mair Chshiev and Matthieu Jamet

OM1-3 : Growth, characterization and spin-orbit torque switching of BiSb topological insulator/MnGa perpendicular ferromagnet systems

Diana SHE, Ludovic LARGEAU, Martina MORASSI, Sajid HUSAIN, Nicholas FIGUEIREDOS, Henri JAFFRES, Patrick LE FEVRE, Nicolas REYREN, Jean-Marie GEORGE, Aristide LEMAITRE

OM1-4 : Growth and electronic properties of Heusler alloys predicted to be topological insulator : toward spin/charge conversion devices

V. Palin, Y. Fagot-Revurat, C. de Melo, C. Guillemard, A. Anadón Barcelona, S. Petit-Watelot, J.C. Rojas-Sanchez, P. Le Fèvre, F. Bertran, S. Andrieu

OM1-5 : Interconversion of spin and charge current in KTaO₃ two-dimensional electron gas for future spintronic devices

Srijani Mallik, Luis M. Vicente-Arche, Julien Bréhin, Sara Varotto, Maxen Cosset-Cheneau, Raphaël Salazar, Paul Noël, Diogo C. Vaz, Felix Trier, Suvam Bhattacharya, Anke Sander, Patrick Le Fèvre, François Bertran, Guilhem Saiz, Gerbold Ménard, Nicolas Bergeal, Agnès Barthélémy, Hai Li, Chia-Ching Lin, Dmitri E. Nikonov, Ian A. Young, Julien E. Rault, Laurent Vila, Jean-Philippe Attané, and Manuel Bibes

OM1-6 : Qualitative and one-to-one dynamic giant magnetoresistance detection of immunomagnetically labelled biological objects for early biological diagnosis

M. Deroo, M. Giraud, F.D. Delapierre, M. Jeckelmann, P. Bonville, M. Thévenin, F. Coneggo, E. Paul, S. Simon, C. Fermon, C. Féraudet-Tarisse and G. Jasmin-Lebras

Mercredi 29 juin, 10h30 – 11h

Pause café

Mercredi 29 juin, 11h – 12h40

Session d'oraux OM2

Imagerie magnétique

OM2-1 : Current induced domain wall dynamics in chemical modulated nanowires

L. Álvaro Gómez, S. Ruiz Gómez, C. Fernández González, M. Schöbitz, N. Mille, D. Tiwari, M. W. Khaliq, M. Foerster, L. Aballe, M.A. Niño, R. Belkhou, J.C Toussaint, C. Thirion, A. Masseboeuf, D. Gusakova, L. Pérez, O. Fruchart

OM2-2 : Imaging the magnetization vector with Fourier Transform Holography

Marisel Di Pietro Martínez, Alexis Wartelle, Carlos Herrero-Martínez, Farid Fettar, Jean-François Motte, Luke Turnbull, Feodor Ogrin, Gerrit van der Laan, Horia Popescu, Nicolas Jaouen, Flora Yakhou-Harris, Guillaume Beutier

OM2-3 : Self-assembly and poisoning effect on binary ferrofluids of flower-shaped nanoparticles

Malika Khelfallah, Hebatalla Elnaggar, Sophie Neveu, Claire Carvallo, Dario Taverna, Vincent Dupuis, Philippe Sainctavit, Nicolas Mille, Rachid Belkhou, James Ablett, Christophe Gatel, Marcin Sikora, Amélie Juhin

OM2-4 : Magnetic imaging of domain walls in CoNiB nanotubes for 3D spintronics

Mahdi Jaber, Martin Christoph Scheuerlein, Dhananjay Tiwari, Jérôme Hurst, Jean-Christophe Toussaint, Wolfgang Ensinger, Olivier Fruchart, Daria Gusakova, Aurélien Masseboeuf

OM2-5 : Construction d'un microscope à force magnétique vectoriel et ultrasensible avec des nanofils de SiC

Hugo Wertz, Philip Heringlake, Benjamin Pigeau, Olivier Arcizet

Mercredi 29 juin, 12h40 – 14h

Repas

Mercredi 29 juin, 14h – 16h

Session d'oraux OM3

Spintronique

OM3-1 : Exploring the scalability of STT-MTJ using the Perpendicular Shape Anisotropy

N. Caçoilo, B.M.S Teixeira, M. L. Calvo-Muñoz, B. Dieny, R. C. Sousa, L. D. Buda-Prejbeanu, O. Fruchart and I. L. Prejbeanu

OM3-2 : Spin currents generation and self-torque in GdFeCo ferrimagnet

Héloïse DAMAS, Alberto ANADON, David CESPEDES-BERROCAL, Davide MACCARIELLO, Junior ALEGRE-SAENZ, Jean-Lois BELLO, Aldo ARRIOLA-CORDOVA, Stéphane MANGIN, Michel HEHN, Vincent CROS, Albert FERT, Sébastien PETIT-WATELOT and Juan-Carlos ROJAS-SANCHEZ

OM3-3 : All-electrical switching of magnetization in epitaxial $Tm_3Fe_5O_{12}$ magnetic insulator thin films deposited by sputtering

Sajid Husain, Nicholas Figueiredo Prestes, Sachin Krishnia, Sophie Collin, Eric Jacquet, Thibaud Denneulin, R. E. Dunin-Borkowski, André Thiaville, Vincent Cros, Nicolas Reyren, Albert Fert, Henri Jaffrès, and Jean-Marie George

OM3-4 : Spin transport as a probe of non-linear fluctuations at the spin glass transition in Pd_{1-x}Ni_x alloys

M. Leiviskä, R. L. Seeger, L. Nagi Reddy, I. Joumard, P. Warin, E. Gautier, L. Vojáček, F. Ibrahim, M. Chshiev, S. Gambarelli, and V. Baltz

OM3-5 : Emission of coherent THz magnons in an antiferromagnetic insulator triggered by ultrafast thermo-elastic processes

E. Rongione, O. Gueckstock, M. Mattern, H. Meer, C. Schmitt, O. Gomonay, M. Kläui, E. Saitoh, T. Kampfrath, H. Jaffrès, S. Dhillon, M. Bargheer, T. Seifert, R. Lebrun

OM3-6 : A simple macrospin model for the magneto-electric control of polarization in THz spintronic emitters

Geoffrey Lezier, Pierre Koleják, Jean-François Lampin, Kamil Postava, Mathias Vanwolleghem, Nicolas Tiercelin

Mercredi 29 juin, 16h – 16h30

Pause café

Mercredi 29 juin, 16h30 – 18h30

Session de posters PM

Dynamique d'aimantation

PM-01 : Flexible magnetic nanostructures: Magnetization strain controlled

N. Challab, D. Faurie, M. Haboussi, A. O. Adeyeye and F. Zighem

PM-02 : Étude des modes magnétiques et phononiques dans des réseaux de trous de Ni₈₀Fe₂₀

S. Chiroli, D. Faurie, N. Challab, P. Djemia, A. Adeyeye and F. Zighem

PM-03 : Renversement topologique de l'effet spin-diode dans les oscillateurs vortex à transfert de spin

Chloé Chopin, Leandro Martins, Luana Benetti, Simon de Wergifosse, Alex Jenkins, Ricardo Ferreira, Flavio Abreu Araujo

PM-04 : Résonance ferromagnétique induite par des ondes acoustiques de surface dans des couches de fer épitaxiées

Louis Christienne, Pauline Rovillain, Jean-Yves Duquesne, Mahmoud Eddrief, Maria Gloria Pini, Angelo Rettori, Silvia Tacchi, Madjid Anane, Massimiliano Marangolo

PM-05 : Picosecond spintronics

Eva Díaz, Alberto Anadón, Sébastien Petit-Watlot, Gregory Malinowski, Stéphane Mangin, Juan Carlos Rojas-Sánchez, Michel Hehn and Jon Gorchon

PM-06 : Spin wave amplification using spin-orbit-torques, A micromagnetic approach

Aya El Kanj, Hugo Merbouche, Diane Gouéré, Isabella Boventer, Romain Lebrun, Paolo Bortolotti, Vincent Cros, Abdelmadjid Anane

PM-07 : New insight on temperature-driven antiferromagnetic to ferromagnetic transition in FeRh from thermoreflectance experiments

C. Gourdon, K. Alhada-Lahbabi, G. Olivetti, V. Uhlíř, J.A. Arregi, D. Fournier, L. Thevenard

PM-08 : Higgs and Goldstone spin wave modes in striped magnetic texture

Matías Grassi, Moritz Geilen, Kossela Ait Oukaci, Yves Henry, Daniel Lacour, Daniel Stoeffler, Michel Hehn, Philipp Pirro, Matthieu Bailleul

PM-09 : Nonlinear interactions between spin-wave modes probed by parametric excitation in YIG microstructures

Titiksha Srivastava, Igor Ngouagnia, Grégoire de Loubens, Hugo Merbouche, Sergej Demokritov, Vladislav Demidov, Massimiliano d'Aquino, Claudio Serpico, Joo-Von Kim, Olivier Klein, Nathan Beaulieu, Jamal Ben Youssef, Manuel Muñoz, Vincent Cros, Paolo Bortolotti, Madjid Anane

PM-10 : Dynamics of bi-stable Néel domain wall under spin orbit-torque

Eloi HALTZ, Christopher H. Marrows, Kévin J. A. Franke

PM-11 : Complex dynamics in mutually coupled spin torque vortex oscillators

Katia Ho, Steffen Wittrock, Salvatore Perna, Claudio Serpico, Romain Lebrun, Vincent Cros

PM-12 : Cavity-FMR studies of LPE epitaxial YIG films

H. Hurdequint, G.de Loubens, J. Ben Youssef, N.Beaulieu and N.Vukadinovic

PM-13 : Phase dynamics in a injection locked spin torque nano-oscillator, a numerical study

Ibarra Gomez Mateo, Hem Jérôme, Talatchian Philippe, Buda-Prejbeanu Liliana D., Ebels Ursula

PM-14 : Dynamique de parois dans des films de grenat de fer

V. Jeudy, L. Albornoz, R. Diaz Pardo, A. Thiaville, N. Beaulieu, J. Ben Youssef, D. Gouéré, M. Anane, S. Husain, J.-M. George

PM-15 : Spin diode effect in extended magnetic garnet thin films

R. Kohno, N. Thiery, K. An, V. V. Naletov, L. Vila, J. Ben Youssef, H. Merbouche, V. Cros, A. Anane, T. Hauet, V. E. Demidov, S. O. Demokritov, G. de Leubens, and O. Klein

PM-16 : Current induced domain wall motion in compensated $Mn_{4-x}Ni_xN$ at room temperature and Ni composition ratio dependence of the properties

T. Komori, S. Ghosh, A. Hallal, J. P. Garcia, T. Gushi, T. Hirose, H. Mitarai, H. Okuno, J. Vogel, M. Chshiev, L. Vila, T. Suemasu, S. Pizzini, and J.-P. Attané

PM-17 : Giant Rashba spin-orbit torque in atomically thin metallic Pt|Co|Al|Pt multilayer structures

S. Krishnia, Y. Sassi, F. Ajejas, S. Collin, A. Fert, J. M. George, N. Reyren, V. Cros, and H. Jaffrès

PM-18 : New improvements on ferromagnetic resonance detection

W. Legrand, R. Schlitz, P. Helbingk, P. Gambardella

PM-19 : Magnonic crystals in Heusler-based Co_2MnSi thin films

S. Manton, N. Biziere

PM-20 : Propagating spin waves in synthetic antiferromagnetic structure: Understanding nonreciprocity

F. Millo, S. -M Ngom, A. Mouhoub, J.-V. Kim, C. Chappert, J. -P. Adam, A. Solignac, T. Devolder

PM-21 : Structure and dynamic magnetic properties of thin and thick SAFs

A. Mouhoub, M. Ngom, J. Letang, F. Millo, J.-V. Kim, A. Solignac and T. Devolder

PM-22 : Effet des épaisseurs de Pt et Ir sur l'interaction de Dzyaloshinskii-Moriya d'interface, l'anisotropie magnétique perpendiculaire et la constante d'amortissement magnétique dans les systèmes à base de Co

D. Ourdani, Y. Roussigné, R. B. Mos, M. Nasui, S. M. Chérif, M. S. Gabor, et M. Belmeguenai

PM-23 : Perfectly Unbiased Truly Random Number Generation using injection-locked Spin-Torque Nano-Oscillators

N-T. Phan, A. Sidi El Valli, A. Hakam, L. Hutin, L. Anghel, U. Ebels, P. Talatchian

PM-24 : Ultrafast pure spincurrent transport through antiferromagnetic insulators

Sanjay RENE, Jean-Baptiste MOUSSY, Michel VIRET, Jean-Yves CHAULEAU

PM-25 : Asynchronous current-induced switching of rare-earth and transition-metal sublattices in ferrimagnetic alloys

G. Sala, C.-H. Lambert, S. Finizio, V. Raposo, V. Krizakova, G. Krishnaswamy, M. Weigand, J. Raabe, M. D. Rossell, E. Martinez, P. Gambardella

PM-26 : Spin dynamics in reconfigurable magnonic crystals based with imprinted magnetization textures in dipolar-coupled bilayers

D. S. Schmool, K. Szulc, A. Hierro-Rodríguez, J. Díaz, P. Gruszecki, C. Quirós, D. Markó, J. I. Martín, M. Vélez, S. Tacchi, P. Graczyk, G. Carlotti, M. Krawczyk, L. M. Álvarez-Prado

PM-27 : Exploring THz spintronics through spin dynamics in antiferromagnets

F. van Duijn, R. Lebrun, R. L. Seeger, E. Yildiz, A.-L. Barra, U. Ebels, V. Baltz

PM-28 : Sauts régis par un processus de Poisson lors de la propagation d'une paroi de domaine magnétique

Xing Tao, Vernier Nicolas, Zhao Weisheng, Zhang Xueying

PM-29 : Quantitative analysis of spin wave dynamics in ferrimagnets across compensation points

Eloi Haltz, João Sampaio, Sachin Krishnia, Léo Berges, Raphaël Weil, Alexandra Mougin, and André Thiaville

PM-30 : Spin Wave Interference from Curvilinear shaped antennae

V. Vlaminck, L. Temdie, V. Castel, B. Youngfleisch, M. Grassi, H. Majjad, R. Bernard, Y. Henry, D. Stoeffler, M. Bailleul

PM-31 : Magneto-acoustic coupling in ferrimagnets

Ashwin Kavilen Vythelingum, Léo Berges, Banan Kerdi, Raphaël Weil, Erwan Dandeu, Alexandra Mougin, Catherine Gourdon, João Sampaio, Laura Thevenard

Imagerie magnétique

PM-32 : Stabilization of 200 nm diameter magnetic bubbles in low-damping ultra-thin garnets with perpendicular magnetic anisotropy

Diane Gouéré, Yanis Sassi, Karim Bouzehouane, Cécile Carretero, Vincent Cros, Paolo Bortolotti, Nicolas Reyren, Abdelmadjid Anane

PM-33 : Objectif compact achromatique en limite de diffraction pour la microscopie NV

Eric Clot, Vladimir Naletov, Isabelle Joumard, Benjamin Pigeau, Olivier Klein

PM-34 : Microscope magnétique à sonde locale intégrant des capteurs magnéto-résistifs

K. Dalla Francesca, W. Benmessaoud, J. Moulin, N. Sergeeva-Chollet, C. Fermon, M. Pannetier-Lecoœur, and A. Solignac

PM-35 : Using magnetic small-angle neutron scattering to investigate the microstructure and magnetic properties of nanocrystalline alloys

Mathias Bersweiler, and Andreas Michels

PM-36 : Atomic-scale magnetic imaging with a molecular STM probe-tip

Alex Férida, Michelangelo Romeo, Olivier Bengone, Laurent Limot

PM-37 : Soft X-Ray Ptychography, an advanced tool for magnetic imaging

N. Mille, S. Stanescu, S. Swaraj, L. Alvaro Gomez, A. Masseur, O. Fruchart, H. Elnaggar, M. Khelfallah, S. Neuveu, A. Juhin, L. Turnbull, M.T. Birch, M. Wilson, B. Huddart, R. Siddani, P. Hatton, R. Belkhou

PM-38 : Time-resolved transmission electron microscope for magnetic imaging

Z. Nekula, E. Gautier, C. Thirion, C. Gatel, C. Pertel, O. Fruchart, A. Masseur

PM-39 : Epitaxial strain tailoring of the antiferromagnetic LaFeO₃ thin film properties

V. Polewczyk, A. Y. Petrov, B. Sarpi, D. Backes, G. Vinai, P. Torelli, F. Maccherozzi, B. A. Davidson

PM-40 : Demonstration of Tuneable Stochasticity in Domain-wall Trajectories: Kerr Imaging of a Nanoscale Magnetic Galton Board

Dédalo Sanz-Hernández, Maryam Massouras, Nicolas Reyren, Nicolas Rougemille, Vojtěch Schánilec, Karim Bouzehouane, Michel Hehn, Benjamin Canals, Damien Querlioz, Julie Grollier, François Montaigne, Daniel Lacour

PM-41 : Disentangling structure and magnetism with single-polarization X-ray ptychography

Alexis Wartelle, Marisel Di Pietro Martínez, Nicolas Mille, Vincent Favre-Nicolin, Stefan Stanescu, Rachid Belkhou, Guillaume Beutier

PM-42 : Scanning NV Magnetometry for Magnetic Memory Devices

Umberto Celano, Peter Rickhaus, Liza Zaper, Floris Braakman, Martino Poggio, Hai Zhong, Florin Ciubotaru, Luarentiu Stoleriu, Alexander Stark, Felipe Favaro de Oliveira, Matthieu Munsch, Paola Favia, Maxim Korytov, Patricia Van Marcke, Patrick Maletinsky, Christoph Adelman, Paul van der Heide

Structures magnétiques topologiques

PM-43 : A micromagnetic theory of skyrmion lifetime in ultrathin ferromagnetic films

Anne Bernand-Mantel, Cyrill Muratov, Valery Slustikov

PM-44 : Static and dynamic properties of 1-kink skyrmion in Pt/Co/MgO trilayer

F. Nasr, Ch.-E. Fillion, O. Boulle, H. Béa and L. D. Buda-Prejbeanu

PM-45 : Eigenmodes of the skyrmion lattice in Fe/Ir(111) systems

Louise Desplat, Bertrand Dupé

PM-46 : Modèle semi-analytique quantitatif pour résoudre la dynamique des nano-oscillateurs à transfert de spin à base de vortex

Simon de Wergifosse, Flavio Abreu Araujo, Chloé Chopin

PM-47 : Imaging topological defects in a non-collinear antiferromagnet

Aurore Finco, Angela Haykal, Stéphane Fusil, Pawan Kumar, Pauline Dufour, Anne Forget, Dorothée Colson, Jean-Yves Chauleau, Michel Viret, Nicolas Jaouen, Vincent Garcia, and Vincent Jacques

PM-48 : Towards room temperature nanoscale skyrmions in ferromagnetic metallic superlattices and 2D van der Waals systems

Anaïs Fondet, Thomas Blon, Sébastien Weber, Etienne Snoeck, Frederic Bonell, Matthieu Jamet, Anne Bernard-Mantel and Christophe Gatel

PM-49 : Non-collinear three-dimensional textures in magnetic multilayers: the emergence of skyrmionic cocoons

M. Grellier, Y. Sassi, C. Léveillé, R. Battistelli, S. Collin, A. Vecchiola, F. Godel, K. Bouzehouane, A. Fert, F. Büttner, H. Popescu, N. Jaouen, V. Cros, N. Reyren

PM-50 : Stabilizing skyrmions in ferrimagnets for efficient motion

Sougata Mallick, Héloïse Damas, Michel Hehn, Nicolas Reyren, Karim Bouzehouane, Thibaud Denneulin, Rafal Edward Dunin-Borkowski, Juan-Carlos Rojas-Sanchez, Vincent Cros, and Albert Fert

PM-51 : Synthetic antiferromagnetic skyrmions

Sujit Panigrahy, Sougata Mallick and Stanislas Rohart

PM-52 : Reversible and non-volatile control of perpendicular magnetic anisotropy in Pt/Co/MOx trilayers

A. Fassatoui, C. Balan, J. Peña Garcia, H. Béa, J. Vogel, L. Ranno, S. Pizzini

PM-53 : Inertia of magnetic skyrmions in synthetic antiferromagnets

Stanislas ROHART, Sujit Panigrahy, Sougata Mallick and João Sampaio

PM-54 : Antiferromagnetic skyrmion and its dynamics

Zixin Li, Théophile Chirac, Julien Tranchida, Jean-Yves Chauleau, Michel Viret

PM-55 : Resonant dynamics of skyrmion lattices in thin film multilayers: Localised modes and spin wave emission

Titiksha Srivastava, Yanis Sassi, Fernando Ajejas, Aymeric Vecchiola, Igor Ngouagnia, Hervé Hurdequint, Karim Bouzehouane, Nicolas Reyren, Vincent Cros, Thibaut Devolder, Joo-Von Kim and Grégoire de Loubens

PM-56 : Structure et énergies des parois chirales sous champ dans le plan difficile

André Thiaville, Pierre Géhanne, Stanislas Rohart, Vincent Jeudy

PM-57 : Symmetry and magnetic textures in thin epitaxial Co films

Jose Peña-Garcia, Lorenzo Camosi, Aymen Fassatoui, Stefania Pizzini, Francesca Genuzio, Andrea Locatelli, Tefvik Onur Menteş, André Thiaville, Stanislas Rohart, Olivier Fruchart, Jan Vogel

Mercredi 29 juin, 19h30 –

Repas

Jeudi 30 juin, 8h30 – 10h30

Session d'oraux OJ1

Dynamique d'aimantation

OJ1-1 : Sub-picosecond magnetization reversal of a ferromagnet

Quentin Remy, Julius Hohlfeld, Maxime Vergès, Yann LeGuen, Jon Gorchon, Grégory Malinowski, Stéphane Mangin, Michel Hehn

OJ1-2 : Dynamic instability in high power FMR of a BiYIG nanodisk

Igor Ngouagnia, Diane Gouéré, Hugo Merbouche, Titiksha Srivastava, Hervé Hurdequint, Vincent Cros, Manolo Muñoz, Soraya Sangiao, José Maria de Teresa, Olivier Klein, Madjid Anane, Grégoire de Loubens

OJ1-3 : Spin pumping in YIG/s-wave superconductor hybrids

Santiago J. Carreira, S. Menouni, C. Carretero, S. Collin, A. Anane, and J. E. Villegas

OJ1-4 : Spin Cavitronics System: from Strong to Ultra-Strong Coupling

Guillaume Bourcin, Vincent Castel, Vincent Vlaminc

OJ1-5 : Spin polarized hot electron induced ultrafast magnetization dynamics in spin valve structures

D. Gupta, M. Pacé, M. Hehn, N. Pontius, C. Schüßler-Langeheine, K. Holldack, N. Bergard and C. Boeglin

OJ1-6 : Coherent amplification of propagating magnons, negative effective damping using transient spin torque

H. Merbouche, B. Divinskiy, D. Gouéré, Aya El Kanj, R. Lebrun, V. Cros, P. Bortolotti, A. Anane, S. O. Demokritov, and V. E. Demidov

Jeudi 30 juin, 10h30 – 11h

Pause café

Jeudi 30 juin, 11h – 12h40

Session de posters PJ

Applications (biologie, technologie de l'information)

PJ-01 : Cartographie locale de la réponse magnétique des matériaux en fréquence

W. Benmessaoud, L. Drigo, S. Rouse, C. Fermon, M. Pannetier-Lecoeur, M. Macouin, N. Sergeeva-Chollet, A. Solignac

PJ-02 : Jonction tunnel magnétique à réponse symétrique pour une application de capteur à modulation magnétique

S. Manceau, C. Ducruet, P. Sabon, C. Cavoit, G. Jannet, L. Prejbeanu, M. Kretzschmar and C. Baraduc

PJ-03 : Flexible, Free-Standing and Magnetocaloric Gadolinium Thick Film For Energy Conversion Applications

Doan Nguyen Ba, Massimiliano Marangolo, Yunlin Zheng, Loic Becerra, Morgan Almanza, Martino Lo Bue

PJ-04 : Multi-GMR sensors tuned by dipolar coupling

J. Torrejon, A. Solignac, C. Chopin, J. Moulin, A. Doll, E. Paul, C. Fermon and M. Pannetier-Lecoeur

PJ-05 : Caractérisation de l'hystérésis magnétique locale d'un noyau laminé ferromagnétique.

Aurélie Solignac, Sorelle Nguedjang, Ruth Sabariego, Laurent Morel, Marie-Ange Raulet, Borel Toutsop, Pierre Tsafack, Benjamin Ducharne

PJ-06 : Investigation of the self-biased Ni/LNO/Ni magnetoelectric laminate composite

Tianwen Huang, Loïc Becerra, Aurélie Gensbittel, Hakeim Talleb, Yunlin Zheng, Massimiliano Marangolo, Zhuoxiang Ren

Croissance et fabrication

PJ-07 : Interprétation des propriétés magnétiques de nanoparticules d'oxyde de fer substitué au zinc par des caractérisations structurales

Anne-Lise Adenot-Engelvin, Marie Darcheville, Christophe Lefèvre, Jean-Marc Grenèche, Clément Sanchez, André Thiaville

PJ-08 : Croissance oblique de couches minces de $\text{Fe}_{43}\text{Co}_{43}\text{B}_{14}$ et de $\text{Ni}_{81}\text{Fe}_{19}$ caractérisées pour différentes épaisseurs.

A.M Aldimassi, B. Warot-Fonrose, C. Marcelot, A. Chevalier, G. Nguyen Vien et B. Rouvellou

PJ-09 : Low damping of submicronic thin films of YIG grown by rf sputtering

Nathan Beaulieu, Diane Gouéré, Hugo Merbouche, Grégoire De Loubens, Abdelmadjid Anane, Laurent Vila, Paolo Bortolotti, Vincent Cros, Olivier Klein, Jamal Ben Youssef

PJ-10 : Croissance de matériaux 2D par ablation laser pulsé pour la spintronique

F. Godel, C. Carretero, V. Zatzko, S. M.-M. Dubois, J. Peiro, M. Galbiati, A. Sander, S. Collin, F. Panciera, G. Patriarche, P. Brus, B. Servet, J.-C. Charlier, M.-B. Martin, B. Dlubak et P. Seneor

PJ-11 : Aimant de van der Waals $(\text{Fe}_{1-x}\text{Co}_x)_5\text{GeTe}_2$: croissance épitaxiale et propriétés magnétiques

J. Courtin, R. Sant, A. Marty, M. Ribeiro, C. Vergnaud, M. Jamet, F. Bonell

PJ-12 : Pulsed Laser Deposition growth of ultra-thin, low-loss YIG with out-of-plane easy magnetization axis

D. Gouéré, H. Merbouche, A. El Kanj, F. Kohl, Y. Sassi, C. Carretero, A. Vecchiola, I. Boventer, R. Lebrun, P. Bortolotti, J. Ben Youssef, V. Cros, A. Anane

PJ-13 : Synthesis of infinite-layer nickelate thin films and the influence of the capping-layer

Guillaume Krieger, Jérôme Robert, Gilles Versini, Laurent Schlur, Nathalie Viart and Daniele Preziosi

PJ-14 : Atomic layer deposition of yttrium iron garnet (YIG)

M. Lammel, D. Scheffler, D. Pohl, P. Swekis, S. Reitzig, H. Reichlova, R. Schlitz, K. Geishendorf, L. Siegl, B. Rellinghaus, L. M. Eng, K. Nielsch, S. T. B. Goennenwein and A. Thomas

PJ-15 : Growth, structural and magnetic properties of Fe_3O_4 epilayers on (0001) and (000-1) ZnO

I. Madaci, E. Popova, P. Vennéguès, M. Nemoz, B. Berini, C. Morhain and Y. Dumont

PJ-16 : Integration of sputtered high-performance Nd-Fe-B micro-magnets into micro-systems

Frederico O. Keller, Richard Haettel, Thibaut Devillers, Nora M. Dempsey

PJ-17 : Self-assembly of hybrid magnetic nanocomposites by pulsed laser deposition

T. Tran, D. Demaille, B. Gallas, G. Patriarche Y. Zheng and F. Vidal

PJ-18 : Refined vertical nanodevice patterning to develop robust (spin) electronics across molecules

Talha Zafar, Samy Boukari, Wolfgang Weber, Benoit Gobaut, Victor Da Costa, Christophe Kieber, Martin Bowen

Nouveaux phénomènes (moléculaires et systèmes 2D, nanostructures 3D)

PJ-19 : Spin-charge interconversion in epitaxial monolayer graphene/ferromagnet interfaces

Alberto Anadón, Adrián Gudín, Rubén Guerrero, Iciar Arnay, Alejandra Guedeja-Marron, Pilar Jiménez-Cavero, Jose Manuel Díez Toledano, Fernando Ajejas, María Varela, Sebastien Petit-Watelot ,Irene Lucas, Luis Morellón, Pedro Antonio Algarabel, Manuel Ricardo Ibarra, Rodolfo Miranda, Julio Camarero, Paolo Perna, Juan Carlos Rojas-Sánchez

PJ-20 : Propriétés magnéto-mécaniques de films minces sur substrat étirable mesurées par MOKE in situ

Ben Mahmoud Hatem, Faurie Damien, Renault Pierre-Olivier, Zighem Fatih

PJ-21 : Magneto-thermoelectricity in 3D interconnected magnetic nanowire networks

Tristan da Câmara Santa Clara Gomes, Nicolas Marchal , Flavio Abreu Araujo , Luc Piraux

PJ-22 : A scanning tunnelling microscope combined with radio frequency to detect magnetic resonance at the atomic scale

Eugenio Gambari, Pascal David, Mathieu Bernard, François Debontridder, Christophe Brun, Tristan Cren, Marie Hervé

PJ-23 : 2D oxide nanosheets for spintronics

Jean-Christophe Le Breton, Florent Baudouin, Bruno Lépine, Philippe Schieffer, Sylvain Le Gall, Pascal Chrétien, Valérie Demange, Pascal Turban

PJ-24 : Propriétés magnétiques d'une assemblée d'îlots ferromagnétiques au voisinage du seuil de percolation

J. Mordret, G. Delhayé, B. Lépine, J-C. Le Breton, S. Tricot, P. Schieffer

PJ-25 : Intrinsic Magnetic Topological Insulators

Michael Wissmann, Aoyu Tan, Joseph Dufouleur, Anna Isaeva and Romain Giraud

PJ-26 : Magnetic proximity effects induced in MoS₂ by Fe(001)/MgO(nMLs) bilayers: A first-principles study

P. Marcon, D. Li, R. Arras and L. Calmels

PJ-27 : Nano-optomechanics of a few-layer FePS₃ suspended membrane

J. Wolff, L. Moczko, S. Berciaud and A. Glippe

Spintronique

PJ-28 : Spin-charge interconversion in 2D transition metal diselenides

K. Abdukayumov, Céline Vergnaud, Alain Marty, Frédéric Bonell, Hervé Boukari, Hanako Okuno, Vincent Maurel, Serge Gambarelli, Sukhdeep Dhillon, Martin Micica, and Matthieu Jamet

PJ-29 : Anisotropic spontaneous Hall effect in unconventional antiferromagnet Mn_5Si_3

M. Leiviskä, R. Lopes Seeger, H. Reichlova, I. Kounta, L. Smejkal, D. Kriegner, L. Michez, E. Schmoranzero, S.T.B Goennenwein, T. Jungwirth, J. Sinova, and V. Baltz

PJ-30 : Magnonics in collinear and canted phases of hematite: from spin-pumping to magnon-photon coupling

I. Boventer, H.T. Simensen, B.Brekke, M.Weides, A. Anane, M.Kläui, A. Braatas and R. Lebrun

PJ-31 : Towards Engineering of Spin-Filtering in 2D-Magnetic Tunnel Junctions

F. Brunnett, V. Zatkan, J. Peiro, S. M.-M. Dubois, M. Galbiati, P. Brus, O. Bezencenet, B. Servet, M. Och, C. Mattevi, F. Godel, A. Vecchiola, K. Bouzehouane, S. Collin, F. Petroff, A. Fert, J.-C. Charlier, M.-B. Martin, B. Dlubak, P. Seneor

PJ-32 : Oscillatory behavior of the low-energy spin precession angle in a magnetic thin film by tuning its molecular field

Valentin Desbuis, Daniel Lacour, Coriolan Tiusan, Christopher Vautrin, Yuan Lu, Wolfgang Weber, Michel Hehn

PJ-33 : Spikes generation using magnetic tunnel junctions

L. Farcis, B.M.S. Teixeira, D. Salomoni, S. Aufrey, P. Talatchian, U. Ebels, S.Auffret, B. Dieny, I.L. Prejbeanu, R.C. Sousa and L.D. Buda-Prejbeanu

PJ-34 : Spin-Orbit torques and magnetization switching in topological-insulator/2D-ferromagnet heterostructures: MBE-grown $CrTe_2/Bi_2Te_3$ heterostructures

N. Figueredo-Prestes, S. Krishnia, P. Tsipas, P. Pappas, J. Peiro, V. Zatkan, N. Reyren, H. Jaffrès, P. Seneor, A. Dimoulas, J.-M. George

PJ-35 : Gate-Controlled Skyrmions in Magnetic Trilayer Tracks

Johanna Fischer, Charles-Élie Fillion, Raj Kumar, Léon Monnier, Aymen Fassatoui, Stefania Pizzini, Laurent Ranno, Laurent Cagnon, Stéphane Auffret, Isabelle Joumard, Olivier Boulle, Gilles Gaudin, Liliana D. Buda-Prejbeanu, Claire Baraduc, Hélène Béa

PJ-36 : Study of Spin-to-Charge interconversion in Ferromagnet/2DEG nanodevices

Fernando Gallego, Felix Trier, Srijani Mallik, Julien Brehin, Sara Varotto, Luis M. Vicente-Arche, Tanay Gosavy, Chia-Ching Lin, Ian Young and Manuel Bibes

PJ-37 : Ultra-small magnetic tunnel junctions with multilayered ferromagnetic structure for fast spin-transfer-torque switching

Junta Igarashi, Butsurin Jinnai, Takanobu Shinoda, Kyota Watanabe, Shunsuke Fukami, and Hideo Ohno

PJ-38 : Magnetic domain wall dynamics in exchange biased trilayer $Cr_2O_3/Co/Pt$

Benjamin Jacot, S. Vélez, C.-H. Lambert, P. Noël and P. Gambardella

PJ-39 : Phase Difference Detection and Detection Sensitivity Optimization with Spin-torque Nano-oscillators

M. Jotta Garcia, S. Wittrock, L. Martins, A. Jenkins, R. Ferreira, U. Ebels, D. Crété, P. Bortolotti, R. Lebrun and V. Cros

PJ-40 : Inverse Rashba-Edelstein effect in CoFeB/MgO magnetic bilayers revealed with THz emission spectroscopy

A. Levchuk, T. Otomalo, Anas El-Hamdi, JB Moussy, G. Vaudel, J.Y Chauleau, P. Ruello, M. Viret, V. Juvé

PJ-41 : MARIA – The high-intensity intensity polarized neutron reflectometer of JCNS – overview of current research and developments

K. Zhernenkov, S. Mattauch, A. Koutsioubas, S. Pütter, A. Syed Mohd, E. Babcock, Z. Salhi, A. Ioffe and Th. Brückel

PJ-42 : Une planche de Galton magnétique à base de spins artificiels

Maryam Massouras, Kousseila Ait Oukaci, François Montaigne, Karim Bouzehouane, Michel Hehn, Rachid Belkou et Daniel Lacour

PJ-43 : Large anomalous Hall effect in the superconducting phase of Co/MoSi/Pt multilayers with Dzyaloshinskii-Moriya interaction

S. Menouni, X. Palermo, S. Carreira, F. Ajejas, F. Godel, S. Collin, K. Bouzehouane, N. Reyren, V. Cros, and J.E. Villegas

PJ-44 : Revealing the morphology and the magnetic properties of cobalt-ZnTPP hybrid heterostructures by FNR spectroscopy

Garen Avedissian, Jennifer A. Wytko, Jean Weiss, Christian Meny

PJ-45 : Lattice-Compliant Simulations of AF Textures & SOT's Action

Jacques Miltat, André Thiaville

PJ-46 : Role of the spin current induced generation of magnons in the current non-linear effects in ferromagnet/normal metal bilayers

Paul Noël

PJ-47 : Control of non-local magnon spin transport via magnon drift

R. Schlitz, S. Vélez, A. Kamra, C.-H. Lambert, M. Lammel, S. T. B. Goennenwein, P. Gambardella

PJ-48 : Adaptation de géométries d'antennes à un émetteur THz spintronique

Matthias Pacé, Oleksandr Kovalenko, Michel Hehn, Martin Bowen, Mircea Vomir, Matthieu Bailleul

PJ-49 : Robust toggle switching in Tb-based multilayers by single shot linearly-polarized laser pulse

Y. Peng, D. Salomoni, G. Malinowski, L. D. Buda-Prejbeanu, R. C. Sousa, I. L. Prejbeanu, J. Hohlfeld, M. Verges, S. Mangin, M. Hehn

PJ-50 : Current controlled perpendicular superparamagnetic tunnel junctions operating at zero applied magnetic field

A. Sidi El Valli, G. Lezier, J. Langer, J. Wrona, R. Sousa, B. Dieny, U. Ebels, P. Talatchian

PJ-51 : Novel Design of a 3D Racetrack Memory Based on Functional Segments in Cylindrical Nanowires

J. Rial, S. Caspani, C. Sousa, R. Guedas, J.L. Prieto, M. P. Proenca

PJ-52 : Growth and multi-scale properties of hybrid magnetic tunnel junctions: towards the control of spinterfaces

Maryam Sadeghiyan, Sophie Guézo, Sylvain Tricot, Bruno Lépine, Soraya Ababou-Girard, Pascal Turban and Francine Sola1

PJ-53 : Engineering of voltage-controlled-magnetic-anisotropy magnetic tunnel junctions at cryogenic temperatures

P. B. Veiga, A. M. Hernandez, L.B. Prejbeanu, I.L.Prejbeanu, L. Vila, S. Auffret, R.C. Sousa, B. Dieny

PJ-54 : Low power magnetization manipulation for spintronics: spin Hall magnetoresistance in multiferroic oxide-based heterostructures

Suvidyakumar Homkar, Elodie Martin, Benjamin Meunier, Alberto Anadon-Barcelona, Corinne Bouillet, Jon Gorchon, Karine Dumesnil, Christophe Lefèvre, François Roulland, Olivier Copie, Daniele Preziosi, Sébastien Petit-Watelot, Juan-Carlos Rojas-Sánchez, and Nathalie Viart

PJ-55 : Probing the spin-polarized electron transport in FeV by spin wave Doppler shift

José Solano, Jérémy Thoravall, Jérôme Robert, Benoît Gobaut, Yves Henry, David Halley, Matthieu Bailleul

PJ-56 : Can Black Phosphorus be as versatile as graphene for spintronic devices ?

H. Wei, M. Galbiati, J. Peiro, F. Brunnett, V. Zatkan, R. Galceran, P. Brus, F. Godel, D. Perconte, F. Bouamrane, E. Gaufres, A. Loiseau, O. Bezencenet, B. Servet, F. Petroff, M.-B. Martin, B. Dlubak, and P. Seneor

PJ-57 : Optimization of the growth of iron garnet epitaxial films for by sputtering deposition for skyrmionic spintronics

Georgy Ziborov, Laurent Ranno, Olivier Boule, Eric Mossang

Jeudi 30 juin, 12h40 – 14h

Repas

Jeudi 30 juin, 14h – 18h30

**Activités sociales, culturelles
et sportives**

Jeudi 30 juin, 18h30 – 19h30

Exposé général

30 Years of Spintronics and Nanomagnetism : a short story of the Louis Néel Colloquium

Jacques Miltat

Jeudi 30 juin, 19h30 –

**Apéritif
Dîner de gala**

Vendredi 1er juillet, 8h30 - 10h30

Session d'oraux OV1

Nouveaux phénomènes

OV1-1 : Chemical and Magnetic order of FeRh nanoparticles deposited on BaTiO₃ (001) and SrTiO₃ (001)

G. Herrera, V. Dupuis, S. Gonzalez, I. Canero-Infante, P. Ohresser, E. Otero, M. Bugnet, B. Vilquin, A. Reyes, A. Vlad, A. Resta, A. Coati, A. Tamion, L. Bardotti, D. Le Roy and F. Tournus

OV1-2 : Magnetically Activated Flexible Thermoelectric Switches based on Interconnected Nanowire Networks

Nicolas Marchal, Tristan da Câmara Santa Clara Gomes, Flavio Abreu Araujo, Luc Piraux

OV1-3 : Energy efficient single pulse switching of [Co/Gd/Pt] N nanodisks using surface lattice resonances

Maxime Vergès, Sreekanth, Perumbilavil, Julius Hohlfeld, Francisco Freire-Fernández, Yann Le Guen, Gregory Malinowski, Daniel Lacour, Michel Hehn, Sebastiaan van Dijken, and Stéphane Mangin

OV1-4 : Strain mediated electrical, mechanical and thermal controls of magnetostrictive Fe-Ga thin films magnetization reversals

M. Liparo, J.-Ph. Jay, W. Jahjah, M. Dubreuil, S. Rivet, Y. Le Grand, A. Fessant, A.R.E. Prinsloo, C.J. Sheppard, B. Warot-Fonrose, D. Spenato, D.T. Dekadjevi

OV1-5 : Spin-dependent Transport Through Photoswitchable Self Assembled Monolayers

L. Jerro, B. Quinard, S. Delprat, F. Godel, S. Colin, A. Sander, A. Vecchiola, K. Bouzehouane, P. Yu, T. Mallah, F. Petroff, P. Seneor and R. Mattana

OV1-6 : Large Dzyaloshinskii-Moriya interaction at the h-BN/Cobalt interface

B. KERDI, A. THIAVILLE, J. SAMPAIO, S. ROHART and A. MOUGIN

Vendredi 1er juillet, 10h30 – 11h

Pause café

Vendredi 1er juillet, 11h - 12h40

Session d'oraux OV2

Structures topologiques

OV2-1 : Stabilization and nucleation of antiferromagnetic skyrmions in synthetic antiferromagnets

Joseba Urrestarazu, Van-Tuong Pham, Kaushik Bairagi, Naveen Sisodia, Markus Weigand, Sebastian Wintz, Nicolas Mille, Rachid Belkhou, Liliana Buda-Prejbeanu, Gilles Gaudin and Olivier Boulle

OV2-2 : Optimization of the spin-orbit torque and device's geometries in order to reach efficient skyrmion dynamics

Yanis Sassi, Dedalo Sanz-Hernández, Sachin Krishnia, Sophie Collin, Karim Bouzehouane, Albert Fert, Vincent Cros, Nicolas Reyren

OV2-3 : Electric field control of chiral magnetic textures in multilayer films with perpendicular magnetic anisotropy

C. Balan, J. Peña Garcia, A. Fassatoui, J. Vogel, L. Ranno and S. Pizzini

OV2-4 : Ferrimagnetic Skyrmions driven by Spin-Orbit Torque in GdCo Thin-Films

Leo Berges, Eloi Haltz, Sujit Panigrahi, Raphael Weil, Sougata Malick, Stanislas Rohart, Alexandra Mougin, João Sampaio

OV2-5 : Gate controlled skyrmion chirality

Charles-Elie Fillion, Johanna Fischer, Raj Kumar, Aymen Fassatoui, Stefania Pizzini, Laurent Ranno, Djoudi Ourdani, Mohamed Belmeguenai, Yves Roussigné, Salim-Mourad Chérif, Stéphane Auffret, Isabelle Joumard, Olivier Boule, Gilles Gaudin, Liliana Buda-Prejbeanu, Claire Baraduc, and Hélène Béa

Vendredi 1er juillet, 12h40 – 12h45

Clôture du colloque

Vendredi 1er juillet, 12h45 – 14h

Repas