

22^{ème} Colloque Louis Néel

17-20 juin 2025, Vogüé



Programme — Liste des Posters

	Mardi	Mercredi	Jeudi	Vendredi
Matin		Oraux session 1	Oraux session 4	Oraux session 5
		8h20-10h30	8h30-10h50	8h30-10h30
		Pause café	Pause café	Pause café
		Oraux session 2	Posters session 2	Oraux session 6
		11h00-13h00	10h50-13h00	11h00-13h00
		Déjeuner	Déjeuner	Panier repas
Après-midi	Accueil et PEPR Spin 15h30-19h00 <i>Remise des clés à partir de 17h</i>	Oraux session 3	Rallye pédestre, temps libre 14h30-18h00	
		14h30-16h50		
		Pause café	Conférence invitée	
		Posters session 1		
		16h50-19h00	18h00-19h00	
Soirée	Apéritif 19h45	Apéritif 19h00	Apéritif 19h00	
	Dîner 20h30	Dîner 20h00	Dîner de Gala 20h00	

Posters session 1— *Mercredi 16h50-19h00*

- S1P1 — Magnetoresistance-based current limiter
- S1P2 — Imprinting of skyrmions and bimerons in a thin film of an antiferromagnet
- S1P3 — Giant stability of nanoscale skyrmions and bimerons in oxidized van der Waals Fe_3GeTe_2
- S1P4 — Altermagnetic variants in thin films of Mn_5Si_3
- S1P5 — Asymptotically exact formulas for the stripe domains period in ultrathin ferromagnetic films with out-of-plane anisotropy
- S1P6 — Spin-Orbit-Torque in Co/Al interfaces
- S1P7 — Metallicity regeneration of chemically ordered FeRh nanoparticles studied by in situ UHV spectroscopy
- S1P8 — *Ab initio* study of nanoscale skyrmions and bimerons in atomically thin van der Waals layers
- S1P9 — Stability of high-Q topological spin textures beyond skyrmions in a van der Waals heterostructure
- S1P10 — Ultrafast dynamics of a spin-polarized electron gas
- S1P11 — Interlayer dipolar fields stabilize bimerons without Dzyaloshinskii-Moriya interaction in magnetic bilayers
- S1P12 — Addressing bottlenecks in fabrication and reading/writing procedures for PSA-STT-MRAMs
- S1P13 — Altermagnetism from Orbital Ordering the Ruddelsden-Popper Chromates
- S1P14 — Engineering magnetic domain wall energies in multiferroic BiFeO_3 via epitaxial strain
- S1P15 — Towards switchable magnetic tunnel junctions based on polyoxometalates monolayer
- S1P16 — Design of an arithmetic logic unit (ALU) using ferroelectric spin orbit (FESO) devices
- S1P17 — Vortex gyrotropic mode excited by surface acoustic waves
- S1P18 — Towards ultrafast deterministic switching in magnetic memory by laser excitation
- S1P19 — Study of skyrmions in ferromagnetic metallic superlattices using in situ Lorentz magnetic methods
- S1P20 — Optimization of synthesis and growth of layered ferromagnetic oxide
- S1P21 — Polarization analysis of multi-magnon excitations in LaFeO_3 thin films using RIXS
- S1P22 — Imaging Antiferromagnetic Texture in Epitaxial Mn_3Sn Thin Films with Scanning NV center Magnetometry
- S1P23 — Probing the antiferromagnetic to ferromagnetic transition in FeRh using surface acoustic waves
- S1P24 — THz emission from topological spintronics elements probed by electro-optic sampling (EOS)
- S1P25 — Level attraction in a quasiclosed cavity: Antiresonance in magnonic devices
- S1P26 — Unraveling temperature-dependent spin-polarized electron transport in Fe via spin-wave Doppler shift
- S1P27 — Nonreciprocal spin waves in adaptive Bi-YIG nanomagnonic devices utilizing domain walls
- S1P28 — Engineering Spin Wave dispersion and Surface Acoustic Wave-driven FMR in Fe thin films by N-implantation
- S1P29 — Revealing the three-dimensional nature of the field-driven movement of magnetic topological defects
- S1P30 — Unconventional flat lifetimes of solitons in 2D easy-plane magnets
- S1P31 — Carbon Doping Effects on MgO Tunneling Barriers and Their Influence on Magnetic Tunnel Junction Noise
- S1P32 — Étude de textures magnétiques générées par impulsion laser sur couches minces
- S1P33 — Étude de la désaimantation ultrarapide des alliages et multicouches CoPt par dichroïsme circulaire magnétique des rayons X
- S1P34 — A step forward with 3D spintronics: electrical control of cocoons
- S1P35 — Entropy-Assisted Nanosecond Stochastic Operation in Perpendicular Superparamagnetic Tunnel Junctions
- S1P36 — Eigenmode following for magnetic lifetime calculations beyond harmonic approximation
- S1P37 — Growth, characterization and THz time-domain spectroscopy of $\text{Bi}_{1-x}\text{Sb}_x/\text{Co}$
- S1P38 — Inverse Rashba Edelstein THz emission modulation induced by ferroelectricity in van der Waals heterostructures
- S1P39 — Detection of magnetic textures via 3-Terminal MRAM devices
- S1P40 — Strategies to measure picoTesla magnetic fields in space
- S1P41 — Passive microwave rectification in perpendicular magnetic tunnel junctions for wireless sensor networks
- S1P42 — Reconfiguring Tunnel Magnetoresistance sensors with Spin-Orbit Torque
- S1P43 — Spin-wave and mechanical modes of suspended YIG microdisks
- S1P44 — Coercivity-driven surface acoustic wave ferromagnetic resonance
- S1P45 — Non-reciprocal caustic spin-wave beams in extended ferromagnetic film
- S1P46 — Spin Hall magnetoresistance at the altermagnetic insulator/Pt interface
- S1P47 — Direct CVD graphene integration for Spintronics
- S1P48 — Depth-resolved magnetization dynamics in Fe thin films after ultrafast laser excitation
- S1P49 — Proximity effect between 2D ferromagnetic and 2D ferroelectric materials
- S1P50 — Epitaxial growth of $(\text{LaVO}_3)_n/(\text{PrVO}_3)_m$ superlattices for emerging multiferroicity
- S1P51 — Contribution of non-uniform magnetization states to the initial susceptibility of soft magnetic materials
- S1P52 — Dissipation properties of altermagnetic versus ferromagnetic Hall devices
- S1P53 — Spin-wave circulation in unbounded ferromagnetic film
- S1P54 — Spin charge conversion with Homo and Hetero bilayers of TMDs : 1H/1T and 1T/1T case study
- S1P55 — Spin and orbital Rashba effects at the Ni/HfO₂ interface

- S1P56 — Magnetic imaging under high pressure with a spin-based quantum sensor integrated in a van der Waals heterostructure
- S1P57 — Exploring Interconversion of Charge Current to Spin Current in Sputter-Deposited Topological Insulating Materials
- S1P58 — Static macromagnetic modelling of multilayers applied to spin-orbit torque characterization
- S1P59 — Exploring NbN-based stacks for superconducting spintronics
- S1P60 — Three terminal devices for improved efficiency
- S1P61 — Multistate MTJs crossbar arrays as hardware AI co-processors: coping with non-idealities
- S1P62 — Magnetic properties of $\text{YCo}_{12}\text{B}_6$ compound studied with neutrons, X-rays and macroscopic characterization techniques
- S1P63 — Micromagnetic analysis of skyrmion trajectories in weak Dzyaloshinskii-Moriya interaction system
- S1P64 — Efficiency of Spin Transfer Torque and Characteristic Switching Times in Unconventional Double-MgO Magnetic Memories
- S1P65 — Low-temperature epitaxial magnetic garnet thin films for quantum magnonics II

Posters session 2— *Jeudi 10h50-13h00*

- S2P1 — (Mis)estimation of spin-orbit torques in the presence of current-induced magnon creation and annihilation
- S2P2 — Method of analysis of the spectra obtained by microfocused Brillouin light scattering
- S2P3 — High-resolution X-ray spectroscopy of highly charged ions for magnetic surface investigation
- S2P4 — Magneto-Ionic Control of Magnetic Anisotropy in Pt/Co/Al Multilayers
- S2P5 — Gate controlled magnetoresistances on antiferromagnetic semiconductor 2D material
- S2P6 — Epitaxial growth of $\text{Mn}_5(\text{Si}_x\text{Ge}_{1-x})_3$ thin films on Ge(111) substrate by MBE: from ferro- to alter-magnetism?
- S2P7 — Spin-torque nano-oscillators for unconventional computing and wireless communication applications
- S2P8 — Self-learning physical neural networks utilising superparamagnetic tunnel junctions
- S2P9 — TMD Engineering of 2D-Magnetic Tunnel Junctions – From Barriers to Electrodes
- S2P10 — Deterministic modelling of ultrafast demagnetization in 3d ferromagnetic elements
- S2P11 — Magnetic properties of epitaxial Mn_4N films doped with non-magnetic elements
- S2P12 — Effets d'épaisseur et de température sur les propriétés magnétiques des systèmes à base de Ir/FeV
- S2P13 — Growth and Characterisation of the Non-Collinear Antiferromagnet Mn_3Sn
- S2P14 — All-inductive observation of linear dynamics and nonlinear processes of spin waves in synthetic antiferromagnets
- S2P15 — Electric field effects on the spin/orbital conversion into charge
- S2P16 — Neuro-Inspired Computing in k-Space: Harnessing Spin Wave Dynamics in YIG Microdisks
- S2P17 — Oersted field driven dynamics in spin-torque vortex oscillators
- S2P18 — Structural and magnetic characterization of $\text{Mn}_{100-x}\text{Sn}_x$ chiral antiferromagnets epitaxial films
- S2P19 — Periodic nanostructures subjected to mechanical stress: Experimental and numerical study of spin waves mode
- S2P20 — Terahertz emission using the spin and orbital Hall effect
- S2P21 — Inductive magnon noise spectroscopy of thermally excited magnons
- S2P22 — Metallised 3D printed plastic resonator demonstrates superconductivity below 4 K
- S2P23 — Using Artificial Intelligence to Explore Magnetic Topological Structures
- S2P24 — Convergence: A Flexible Tool for Developing Materials at SPINTEC
- S2P25 — Graphene/CoFeB-Based Heterostructures : Influence of Direct and Oxide-Separated Interfaces on Dynamic Magnetic Properties
- S2P26 — Stochastic phase dynamics of an array of coupled, injection-locked spin-torque nano-oscillators
- S2P27 — Singulus advanced thin-film deposition sputtering system: Capabilities and Applications
- S2P28 — Integration of new materials with strong spin-orbit coupling (van der Waals tellurides) for SOT-MRAM memories
- S2P29 — Interference effects in the parametric excitation of spin waves in confined geometry
- S2P30 — Embedded nano-magnets for thermoelectric applications
- S2P31 — Propagation of spin waves in magnetic non-uniform textures
- S2P32 — Optimisation de la sensibilité de capteurs AMR $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ sur substrat vicinal SrTiO_3 par intégration de concentrateurs de flux magnétique
- S2P33 — Room temperature detectivity of anisotropic magnetoresistive sensors patterned in $\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3$ and in Cr_4Te_5 thin films
- S2P34 — Magnetoelectric coupling reprogrammed magnonic waveguides in multiferroic/ferromagnetic heterostructure
- S2P35 — Bi:YIG garnet thin films for spintronics
- S2P36 — Anomalous thermal drift of skyrmions in frustrated magnets under spin-orbit torques
- S2P37 — Magnetization dynamics in Bismuth-doped Yttrium Iron Garnet Films
- S2P38 — Enhancement of the current-induced torque by orbital torque
- S2P39 — SOT- and Magnetic Field-Driven Domain Wall Dynamics

- S2P40 — Influence of applied deformation on magnetic properties: ferromagnetic $Ni_{60}Fe_{40}$ thin films deposited on polymeric substrate
- S2P41 — Dzyaloshinskii-Moriya interaction in Fe_5GeTe_2 epitaxial thin films
- S2P42 — Spin-Orbit Torque Magnetic Tunnel Junctions at Cryogenic Temperatures
- S2P43 — Symmetry of the dissipation of surface acoustic waves by ferromagnetic resonance
- S2P44 — Experimental and numerical study of dipolar interactions in complex magnetic fluids
- S2P45 — Magnetic textures and dynamics in ultra-thin bidimensionnal ferromagnets Fe_xGeTe_2
- S2P46 — Ferroelectric control of spin-charge interconversion in oxide-based two-dimensional electron gases
- S2P47 — Brillouin Light Scattering and BiYIG epitaxial films
- S2P48 — Spin-polarized transport across a fluctuating molecular spin 1/2 two-level system
- S2P49 — Tuning the magnetic anisotropy of Pt/Co-based thin films using electric fields
- S2P50 — Towards Fiber-Integrated Cryogenic NV Microscopy for High-Resolution Magnetic Mapping
- S2P51 — Nonlinear interactions between parametrically excited spin-wave modes in a YIG microdisk
- S2P52 — Skyrmions for neuromorphic computing applications
- S2P53 — Multiscale atomistic code for material design Matjes
- S2P54 — Caustiques d'ondes de spin dans un matériau non-réciproque confiné latéralement
- S2P55 — RF magnonic devices: modelling, experiment and integration
- S2P56 — Monolithic integration of magneto-optic garnet deposited by RF sputtering on LNOI
- S2P57 — A scanning tunneling microscope combined with radio frequency to detect magnetic resonance at the atomic scale
- S2P58 — Higher order topological defects in the moiré lattice of a van der Waals magnetic material
- S2P59 — Controlling encirclement of an exceptional point using coupled spintronic nano-oscillators
- S2P60 — Magnetic vortex dynamics probed by time-resolved magnetic helicoidal dichroism
- S2P61 — Imaging of Gate-Controlled Suppression of Superconductivity by Scanning Nitrogen-Vacancy Magnetometry
- S2P62 — Study of (Gd,Bi) iron garnet films with high orthorhombic magnetic anisotropy grown by liquid-phase epitaxy for Dzyaloshinskii-Moriya interaction investigation
- S2P63 — Spectroscopy of Azimuthal Magnon Modes by NV-Center Magnetometry
- S2P64 — Phase analysis of 1f injection locked spin transfer nano-oscillator
- S2P65 — Manipulation of topological spin textures for reservoir computing

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