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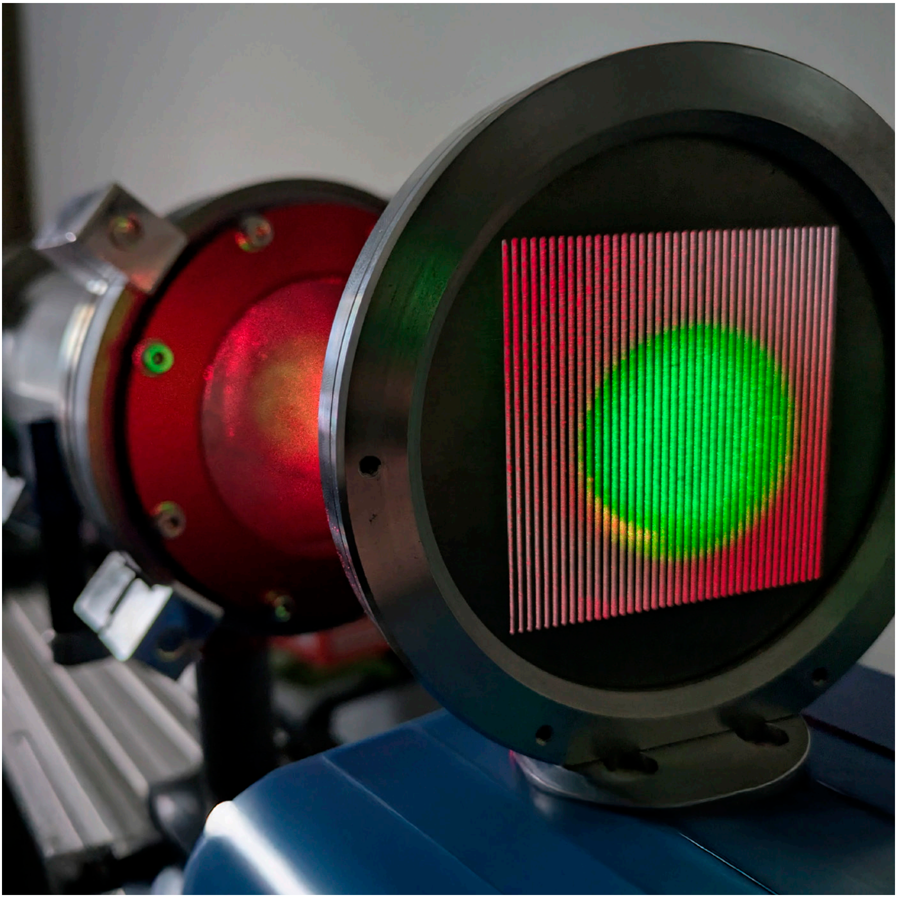


SWISS NEUTRON SCIENCE SOCIETY

Schweizerische Gesellschaft für Neutronenforschung
Société Suisse de la Science Neutronique
Società Svizzera di Scienza dei Neutroni

On the cover

Diffraction grating illuminated by green and red lasers through a vacuum tube. This staged optical setup recreates, in visible light, the intricate interference pattern of a neutron Talbot–Lau interferometer. It helps explain and test the instrument's behavior in the lab without requiring access to a neutron-producing facility.

Join the Swiss Neutron Science Society

...and support all fields of science using neutron radiation in Switzerland. The annual membership fee is CHF 20.-, and free for Bachelor-, Master-, and PhD-students.

Send an email to sgn@psi.ch to join us.

Contents

The President’s Page

Dear fellow neutron scientists,

As we look back on the past year, I want to share some updates and highlight the progress within our neutron science community.

The International Conference on Neutron Scattering in Copenhagen this June was a success, with strong Swiss participation. Our talks, including a keynote, and the active presence of many students and the SINQ^{++} booth made a clear impression. Thank you to everyone who contributed and represented us so well.

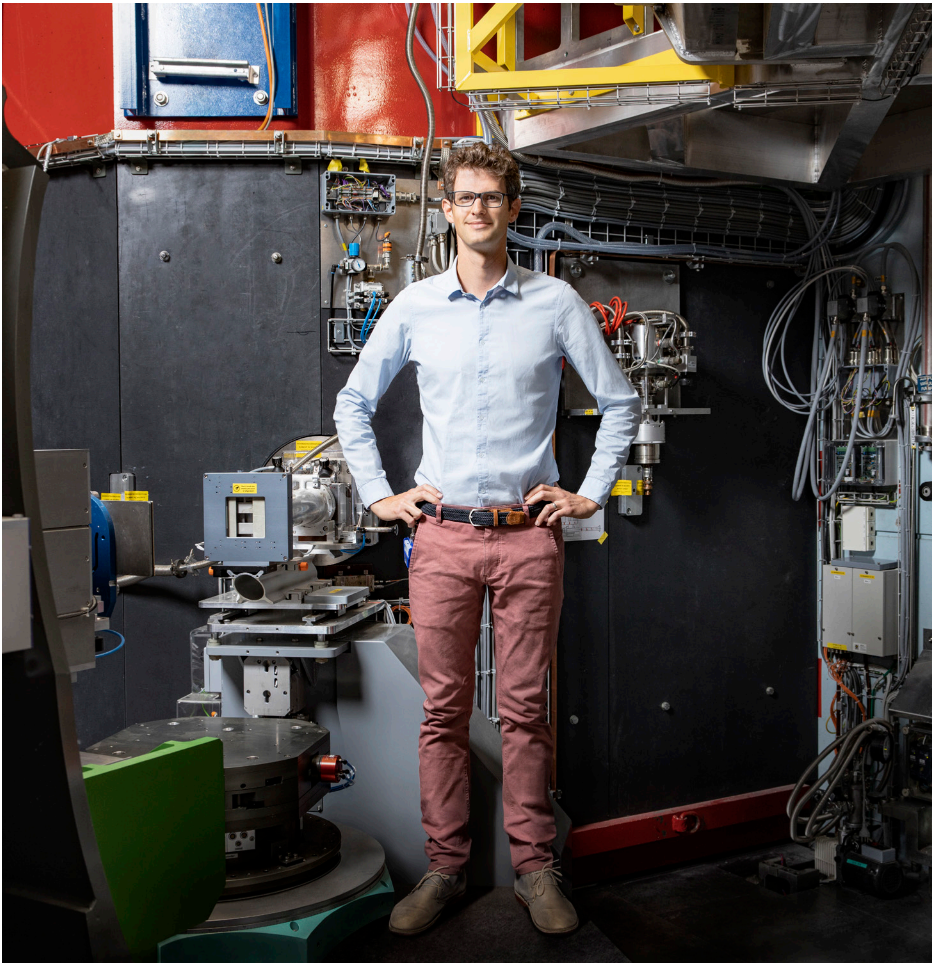
Following ICNS, the European Neutron Scattering Association released a position paper (https://ensa.ife.no/wp-content/uploads/2025/07/ENSA-position-paper_2025_print.pdf) on the future of neutron scattering in Europe. Though the document reflects a compromise throughout quite diverse national communities within Europe, it outlines the challenges and opportunities ahead for our field, and is therefore important to read for all of us.

This year also brought two important milestones: the Institut Laue Langevin extended its operations until 2033, and the European Spallation Source confirmed that beam on target will begin in March 2026. This marks the start of neutron production and the hot commissioning of the first instruments, with ‘first science’ likely from spring or summer 2026. These early experiments will be crucial in demonstrating the unique capabilities of the ESS and how it complements our national source, SINQ, and the ILL. Even with limited flux at first, the ESS instruments offer new possibilities; we can all think about how our research could benefit from these opportunities, and reach out to them to discuss these ideas.

The ESS is also moving forward with its next set of instruments. The call for input to the ESS Instrument Roadmap is open until February 3, 2026. We already see strong Swiss involvement in the proposals, reflecting the innovative spirit of our community.

On the side of our national facility, defining the science cases for SINQ’s future is a task for all of us, and your input is essential. The SINQ^{++} project is now taking its first steps in this direction, with working groups forming to develop these cases. The SINQ^{++} workshop on April 29-30, 2026, will be an important part of this process, and the SNSS fully supports this initiative.

As announced separately, the SNSS will now reach out to members four times a year. Two newsletters will share links to the latest SNN, various updates, and calls for nominations and announcements of the Young Scientist Prize winners. We will also meet twice a year in person: the General Assembly in spring and a new Thematic Day in autumn. The Thematic Day will always focus on the research area of the Young Scientist Prize winner, offering a chance to explore topics that may be new to many of us but are relevant to the broader community. We hope these events will bring us together and foster learning across different fields.



This year's Young Scientist Prize winner, Shieren Sumarli, is featured in this issue of the Swiss Neutron News. Congratulations, Shieren, on this achievement!

In this issue, you'll also learn more about our newest board member, Livia Bove, who has already contributed significantly to our work. Thank you, Livia, for your engagement.

I hope you will enjoy reading the two scientific contributions in this edition. The first explores the neutrality of the neutron, a story rooted in Swiss research! The second discusses how electric fields can be used to deflect magnetic skyrmions – spin textures with potential technological applications. Both studies highlight the unique experiments made possible by our national and European neutron sources.

Let's continue to make the most of the opportunities available to us and work together to grow and advance our community. I look forward to seeing many of you at our upcoming events.

Best regards,
Romain Sibille

New Board member

The SNSS welcomes a new board member

Livia E. Bove is a CNRS Director of Research at Sorbonne University, Associate Professor at Sapienza University, and Associate Scientist at EPFL. Her research focuses on molecular systems under extreme conditions, with emphasis on hydrogen bonding, clathrate hydrates, and high-pressure ices. She has over two decades of experience using inelastic and quasi-elastic neutron techniques and neutron diffraction under high pressure. She has served on the scientific council of the Institut Laue-Langevin and the CNRS Physics Institute, and chaired the ILL “Liquids and Glasses” panel. Her current work combines neutron and synchrotron experiments with quantum molecular dynamics to explore gas-host interactions, transport, and phase transitions in energy and planetary materials.

2025 Young Scientist Prize of the Swiss Neutron Science Society

The Young Scientist Prize is awarded every year from SNSS to young scientists in recognition of the impactful use of neutrons during their PhD thesis or the five years after. The prize amounts to a gratification of 1000 CHF and is sponsored by SwissNeutronics. A call for nominations will be open early 2026 with a deadline on 9th March.

Dr. Shieren Sumarli

Shieren Sumarli holds a bachelor's and master's degree in Metallurgical Engineering from Bandung Institute of Technology and RWTH Aachen University, and a PhD in Materials Science from EPFL. She completed her master's program with distinction and received the Springorum Denkmünze. This early achievement strengthened her interest in materials research and paved the way for her doctoral work. During her PhD at the Paul Scherrer Institute, she designed and built a laser-based metal additive manufacturing system integrated with real-time neutron-based characterization to investigate how process behavior shapes microstructure and performance. Her research combined system development, process monitoring, experimental design, and detailed data analysis, which resulted in peer-reviewed publications, invited talks, and growing recognition in both the neutron science and metal AM communities. Building on this foundation, her expertise now spans investment casting, metal AM, process development, process automation, and multi-scale and multi-modal materials characterization.

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How Neutral is the Neutron?

Marc Persoz* **and Florian M. Piegsa**

Laboratory for High-Energy Physics and Albert Einstein Center for Fundamental Physics, University of Bern

Abstract

In the Standard Model, the electric charge of fundamental particles is quantized in units of the electron charge, yet the origin of this quantization remains unknown. Moreover, whether or not the neutron carries a tiny non-zero charge constitutes an open question which needs to be addressed experimentally. At the University of Bern, we have developed the QNeutron experiment: a high-contrast and high-sensitivity Talbot-Lau neutron interferometer capable of resolving sub-nanometer beam deflections. Using cold neutron beams at the Paul Scherrer Institute and the Institut Laue-Langevin, we commissioned a proof-of-principle apparatus and performed an initial, yet non-competitive, measurement of the neutron electric charge. The results demonstrate how the experiment can be upscaled to reach a future world-best sensitivity. We also highlight that grating interferometry represents a powerful tool in the realm of precision fundamental physics.

INTRODUCTION

Despite its great success, the Standard Model of particle physics (SM) still leaves some of the most fundamental questions unanswered. Why does our universe contain so much more matter than antimatter? What is the identity of dark matter – is it made of yet unknown particles? How can we explain dark energy? Are there extra dimensions? And why is the electric charge of all particles quantized in units of the electron charge [1–3]?

The neutron provides a unique window into these questions. Although stable inside atomic nuclei, a free neutron decays within about 15 minutes – long enough to be studied precisely in the laboratory. It possesses a magnetic dipole moment and interacts through both the strong and weak forces, but the SM predicts its electric charge to be exactly zero [4]. This exceptional combination makes the neutron a sensitive tool to investigate extremely small effects in searches for new physics.

For decades, the neutron has been at the center of precision experiments. Its lifetime shows a persistent almost ten-second discrepancy between two measurement techniques, with implications for models on element formation in the early universe [5, 6]. Searches for a permanent electric dipole moment, sensitive to new sources of CP violation, now reach the 10^{-26} e cm level – testing physics beyond energies reached by state-of-the-art collider experiments [7]. Another property, perhaps the most fundamental of all, is the neutron electric charge. The best direct measurement to date was performed by Baumann et al. in 1988, who searched for a transverse deflection of a cold neutron beam in a strong electric field [8]. No evidence of such a deflection was found, and the resulting upper bound on the neutron charged remains at the level of 10^{-21} e. Any deviation from neutrality, however, would directly point toward new physics beyond the SM and would also challenge electric charge quantization itself.

At the University of Bern, we follow the same path, however, with modern and improved instrumentation. If the neutron carried a charge Q_n, a transverse uniform electric field E acting over a length L would produce a deflection

$$\Delta y \;=\; \frac{Q_n\, E\, L^2}{2\, m_n\, v^2}\,,$$

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*Corresponding author: marc.persoz@unibe.ch where m_n is the neutron mass and v the longitudinal velocity. With realistic interaction lengths, cold neutron beam velocities, and technically achievable fields, improving on the 10^{-21} e limit translates into resolving beam deflections at the picometer level over meter-long experiments [9]. This is a challenging objective, and among the available techniques, interferometry provides the required combination of displacement sensitivity, stability, and statistics.

Within the Fundamental Neutron and Precision Physics group, we have built and operated the QNeutron apparatus – a cold neutron Talbot-Lau interferometer designed precisely to push this limit. Here, we describe the principle of the interferometer, report the achieved sensitivity, and present a proof-of-principle result demonstrating that the method can realistically reach and potentially exceed the current best limit on the neutron electric charge.

NEUTRON GRATING INTERFEROMETRY

A Talbot-Lau interferometer adapted to neutrons consists of a system of three absorption gratings [10]. The first grating G_0 divides the extended incoherent beam into a series of coherent line sources; the second, G_1, generates a periodic intensity interference pattern at a certain distance behind it; and with the third, G_2, a transversal scan is performed to analyze this modulation using a neutron detector. The setup and the scanning procedure is illustrated in Fig. 1. Once all components are well aligned and the modulation is established, grating G_2 is positioned at the working point w_p, i.e. the point of steepest slope of the modulation. There, already a very small transverse deflection of the beam produces the maximum change in neutron counts, which yields the best sensitivity of the interferometer. In our apparatus a transverse electric field is applied between G_1 and G_2, so any potential charge-induced shift of the modulation pattern will result in a direct change in the

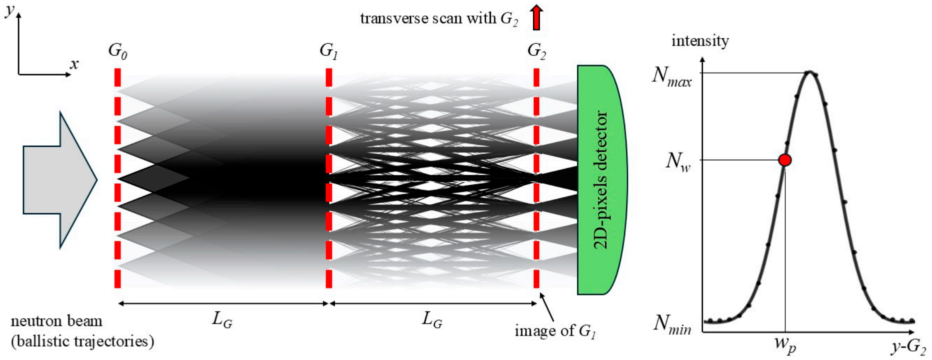

FIG. 1

Top-view schematic of a Talbot-Lau neutron interferometer operating in the ballistic regime. The three identical absorption gratings are separated by a distance L_G. They provide collimation such that a shadow image of G_1 is established at the position of G_2. In a transverse scans of G_2 the resulting intensity modulation is recorded, from which the working point w_p is identified – location where the sensitivity to a beam deflection is maximum.

neutron intensity at w_p. In addition, we employ the so-called two-beam method with two separate beams experiencing antiparallel electric field directions which allows compensation of drifts and noise due to vibrations, temperature changes, or overall beam intensity fluctuations.

The interferometer can be operated in two distinct regimes. In the diffraction regime, the periodic modulation originates from near-field diffraction on G_1 creating repeated self images at regular distances away from the grating plane. These distances depend on the neutron wavelength and are described via the characteristic Talbot length $L_T = p^2/\lambda$, where p is the grating period (typically in the range of 10 to 500 µm) and λ the neutron wavelength [11, 12]. Only wavelengths satisfying the associated Talbot condition contribute coherently, making this regime intrinsically wavelength dependent. At a continuous polychromatic neutron source, such as the SINQ or the Institut Laue-Langevin (ILL), a chopper must be used to provide a pulsed beam and to perform a time-of-flight measurement. The latter enables operation in the diffraction regime, but discards a large fraction of the available flux. In contrast, the ballistic regime applies for larger grating periods. In this case, diffraction effects are negligible since the grating distance L_G is much smaller compared to L_T across the entire wavelength spectrum . The resulting modulation is then essentially given by the geometric shadow of G_1 at G_2. The regime is wavelength independent and the full spectrum contributes to the signal, representing a major statistical advantage.

The choice of regime directly affects the statistical sensitivity to beam deflections, since the uncertainty on the measured displacement scales as

$$\sigma(\Delta y) \propto \frac{p}{\sqrt{N_w}},$$

where N_w describes the neutron intensity at the working point. In principle, the diffraction regime allows for smaller p and thus a steeper slope at the working point. However, at a continuous source the necessary time-of-flight procedure reduces the usable flux so strongly that the advantage is largely compensated. Hence, an interferometer in the diffraction regime is better suited for a pulsed neutron source, like for instance the upcoming European Spallation Source (ESS) in Sweden. On the other hand, an interferometer in the ballistic regime with larger p can be operated at a continuous source. Moreover, the alignment process of the gratings is far simpler and the system is intrinsically less susceptible to instabilities over long measurement times. This made it the preferred choice for our first neutron charge measurement at the cold neutron beam facility PF1B at ILL [13, 14].

FROM A PROTOTYPE TO A PRECISION INSTRUMENT

QNeutron is the result of multiple iterations of the Talbot-Lau apparatus. The project was launched in 2020 with a 0.5 m-long bench prototype that demonstrated the basic principle of grating interferometry with cold neutrons. From that starting point, repeated cycles of design, fabrication, technical upgrades, and in-beam characterization turned the prototype into a 6 m-long full-scale instrument. As an example, each absorption grating is fabricated on a 4-inch diameter polished sapphire wafer. A gadolinium coating is sputtered over the full surface, and the line pattern is engraved directly into the absorber using a laser. This method yields mechanically robust gratings with high neutron absorption and excellent uniformity [15–17]. The wafers are mounted vertically on precision stages providing sub-micrometer

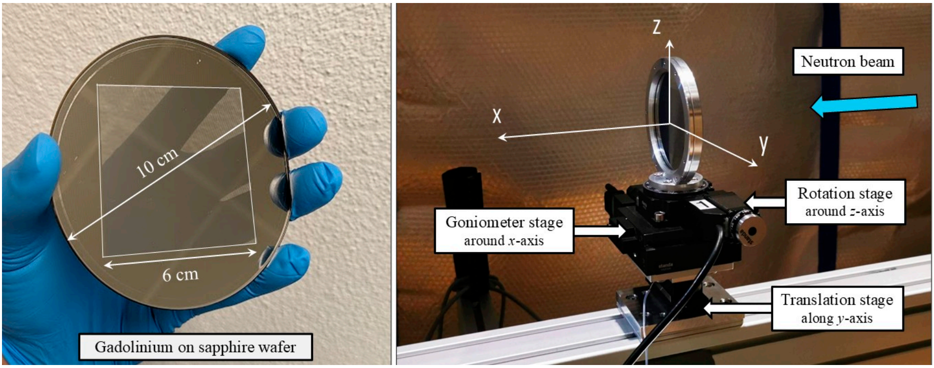

FIG. 2
Left: Neutron absorption grating: a thin gadolinium layer is sputtered on a sapphire wafer with laser-engraved slits. Right: A grating installed on precision motorized stages for fine alignment.

translational and microradian rotational resolution in all relevant degrees of freedom. A coarse alignment is first done optically with a laser before the fine alignment is performed with the neutron beam until the fringe contrast is maximized. A grating mounted in its holder and installed on three precision motorized stages is shown in Fig. 2.

Over the following three years, our scientific program spanned across eight beam times at the BOA beamline at SINQ, accumulating about 80 days of beam operation. The goal was to improve every component of the setup: optimize the grating duty cycle and absorber thickness, refine mounting and alignment procedures, and characterize the 2D pixel detector for resolving multiple

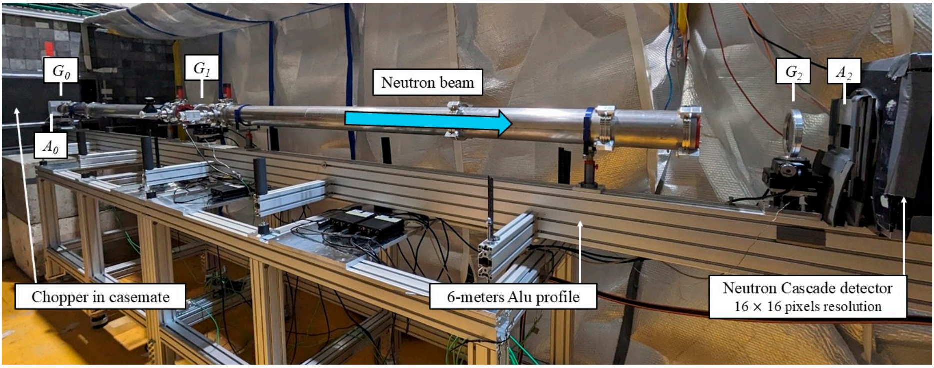

FIG. 3
QNeutron apparatus installed at the PF1B beam line of the ILL during a time-of-flight characterization in December 2023. The neutron beam travels from left to right and is defined by two square apertures (A_0 and A_2) with a 5 × 5 cm^2 cross-section. The entire 6 m-long setup is mounted on a temperature-stabilized aluminum profile supported by a vibration-damped table.

beam spots. We also explored both operating regimes. In the diffraction regime we used a custom-designed Fermi chopper to investigate the behavior of the setup and the modulation visibility as a function of the neutron wavelength. In the ballistic regime, we demonstrated that the full cold spectrum contributes to the signal and focused on assessing the long-term stability of the apparatus. These campaigns established the practical trade-offs between contrast, stability, and usable flux. With a mature instrument at hand, we moved to the PF1B beamline at ILL for approximately 30 days of characterization using the final iteration of QNeutron presented in Fig. 3. At ILL, we repeated the full program under high-flux conditions: ballistic and diffraction operation with the chopper, in each case measuring the wavelength dependence and long-term stability of the setup. This allowed us to cross-check the PSI results, validate the robustness of the ballistic regime at a continuous source, and finalize alignment and monitoring procedures for long integration times.

MEASURING THE NEUTRON ELECTRIC CHARGE

After this comprehensive characterization, we switched to the first dedicated electric charge measurement where the chopper is removed employing the full cold neutron spectrum. We mounted a high-voltage electrode system between G_1 and G_2 that generates two adjacent beam regions with antiparallel transverse electric fields, i.e. a central high-voltage electrode flanked by ground electrodes; see Fig. 4. This symmetric two-beam geometry makes a genuine charge-induced deflection appear with opposite signs in the two beams, while common-mode drifts and noise cancel to first order. The instrument was held at the working point, and the field polarity was reversed at regular intervals of approximately 5 minutes. The neutron rates in the two beam spots were recorded continuously and then compared for both polarities to extract a potential field-correlated deflection.

The proof-of-principle charge measurement campaign comprised about seven

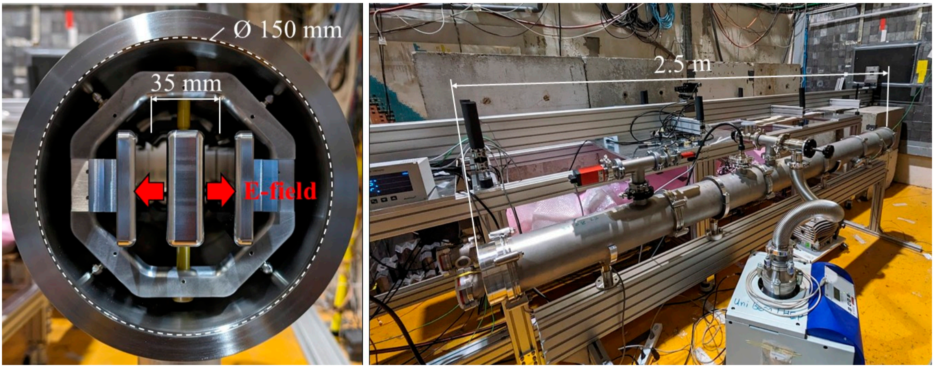

FIG. 4
Left: Electrode stack mounted in the vacuum pipe. The central high-voltage electrode is flanked by two ground electrodes, defining two beam spots where the transverse electric fields are antiparallel. Right: Full 2.5 meters electrode assembly installed on a test bench for commissioning before integration into the experiment.

beam days at PF1B, with four net days of data acquired under high-voltage conditions. The analysis uses the in-situ calibration between a known mechanical shift of the analyzer grating G_2 and the observed change in intensity. In this configuration we achieved a sensitivity to beam deflections of roughly 100 pm, which, combined with the known electric field and interaction length, corresponds to a neutron electric charge sensitivity on the order of 10^{-19} *e*. While not yet competitive with the current limit, we demonstrated that our instrument is capable of resolving sub-nanometer shifts reliably over long integration times, and the two-beam high-voltage geometry makes the setup highly insensitive to slow drifts.

PROSPECTS FOR A FUTURE EXPERIMENT

From here the route to better sensitivity and an improved neutron electric charge measurement is clear: more flux, increased detection efficiency, stronger fields, longer interaction lengths, and extended measurement time. The next campaigns at ILL and later at a pulsed source, such as the ESS, will provide the statistics and operating conditions to take this path [18].

The charge sensitivity scales inversely with the electric field and the square of the interaction length, and improves with the square root of the total statistics. Several realistic upgrades at ILL could therefore already provide a substantial boost in the ballistic regime. The applied electric field can be increased, the detection efficiency improved using a new high-efficiency neutron detector currently under development in our laboratory, and the effective measurement time extended from a few days to months-long continuous campaigns. In addition, installing a second electrode section between G_0 and G_1 would immediately double the interaction length. Together, these improvements would yield a large overall gain in sensitivity, bringing the experiment toward the 10^{-21} *e* range without altering the core measurement principle.

The diffraction regime offers an additional path forward. Here, the deflection sensitivity improves as the grating period is reduced, but at continuous sources this advantage is typically compensated by the loss of intensity associated with chopper-based wavelength selection. In practice, the two regimes deliver similar raw sensitivities at ILL. Looking further ahead, a future fundamental physics beamline at the ESS will allow time-of-flight tagging without loss in flux. This unlocks the full potential of the diffraction regime, where the demonstrated stability and sensitivity of the QNeutron apparatus combined with the ESS pulse characteristics promises a decisive step beyond the current sensitivity frontier.

CONCLUSION

The QNeutron experiment has demonstrated, for the first time, that neutron grating interferometry can be applied as a precision tool to search for the electric charge of the neutron. Operating in the ballistic regime at the PF1B beamline at ILL, the apparatus achieved a sub-nanometer sensitivity on beam deflections and established a robust measurement strategy based on a two-beam geometry with antiparallel electric fields. The resulting dataset shows no evidence of a finite neutron charge and validates the method as a viable approach for future high-precision searches. Although the present measurement remains statistically limited and does not yet surpass the world's best limit, it confirms that the technique provides the required stability and resolution to reach this level in an upgraded configuration. With higher electric fields, longer interaction lengths, improved detection efficiency, and extended operation time, the QNeutron apparatus can achieve sensitivities in the 10^{-21} e range. Looking further ahead, the diffraction regime accessible at the pulsed ESS offers a clear path toward an additional order-of-magnitude improvement. Overall, QNeutron represents a novel interferometric route to answer the question of ”how neutral is the neutron ?”

ACKNOWLEDGMENTS

This report summarizes work carried out by the entire Fundamental Neutron and Precision Physics Group of F.M. Piegsa at the University of Bern and builds upon the doctoral research of M. Persoz [19]. The authors gratefully acknowledges the outstanding contributions of S. Bosco, L. Meier, E. Elsholtz, and F. Tschan from the University of Bern, as well as T. Soldner and D. Berruyer from the Institut Laue–Langevin and U. Filges and C. Klauser from the Paul Scherrer Institute. The experiments were performed at the Institut Laue–Langevin in Grenoble, France and at the Swiss Spallation Neutron Source SINQ at the Paul Scherrer Institute in Villigen, Switzerland. This work was supported by the Swiss National Science Foundation under Grant No. 181996 and No. 215185.

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Steering magnetic spirals with electric fields

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Abstract

Magnetoelectric (ME) materials host a unique interplay between magnetic and electric properties, where applying an electric field can trigger unexpected magnetic responses. These effects make ME materials interesting for applications ranging from sensors to energy-efficient memory devices. In this work, we use small-angle neutron scattering to explore the archetypal chiral ME material Cu_2OSeO_3 and uncover a novel response: the propagation direction of a magnetic spiral can be actively controlled and deflected along well-defined paths using an applied electric field. Our theoretical analysis explains this behaviour and predicts new regimes of non-linear spiral deflection that emerge under stronger electric and magnetic fields. This discovery demonstrates how electric fields can be used to finely tune large-scale magnetic structures, opening the door to future devices with controllable magnetisation and electric polarisation.

INTRODUCTION

In today's world, where both sustainability and performance drive technological progress, researchers are constantly seeking ways to make our electronic devices more energy-efficient and environmentally friendly. One promising route lies in magnetoelectric materials where magnetism and electricity are intimately linked. This unique connection allows an electric field to influence magnetic behaviour, and vice versa, opening the door to devices that could operate with far lower power consumption than modern technologies.

Magnetoelectrics have been studied for many years, with exciting discoveries ranging from electric-field-induced magnetic switching to the motion of tiny magnetic whirlpools known as skyrmions [1, 2]. Yet, one area remains less explored: how large-scale magnetic structures, such as magnetic spirals that repeat over many atomic distances, respond to electric fields. These structures are fascinating because they behave collectively, rather than as independent spins, giving rise to complex and often unexpected effects.

In our recent work [3], we used small-angle neutron scattering (SANS) to directly observe how these spiral magnetic structures behave under an applied electric field in the model magnetoelectric compound Cu_2OSeO_3. We found that a moderate electric field gently steers the orientation of the spirals, effectively freeing them from the magnetic interactions that usually fix their winding direction. Our theoretical analysis shows that this electric-field control is deterministic, predictable and tunable, and even leads to measurable changes in the overall magnetisation and electric polarisation of the crystal. These findings reveal new possibilities for precisely controlling complex magnetic textures using electric fields, an ability that could one day be harnessed in low-power technologies or smart sensing applications

RESULTS AND DISCUSSION

To explore how electric fields can influence complex magnetic structures, we studied the model magnetoelectric material Cu_2OSeO_3. This compound hosts variety of intricate magnetic textures (A selection shown in Fig. 1) from simple helices to swirling skyrmion lattices emerging at low temperatures [4, 5]. These structures are formed when the magnetic moments of the copper ions arrange themselves into collective, periodic patterns extending over

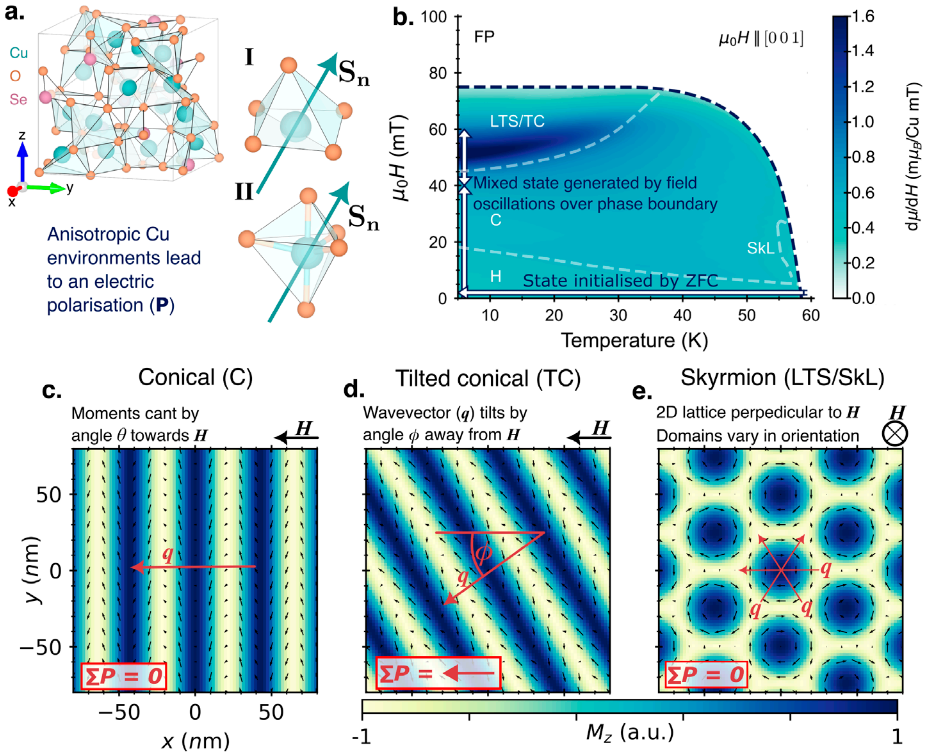

FIG. 1

Magnetic and electric behaviour of Cu_2OSeO_3 when a magnetic field is applied along the [0 0 1] **direction. a,** Cu_2OSeO_3 has a chiral cubic crystal structure and lacks a centre of symmetry. Within the crystal, two different copper environments carry magnetic moments (spins). The way these spins tilt relative to each other causes tiny local electric dipoles to appear, which can add up to a measurable electric polarisation depending on the magnetic pattern. **b,** When a magnetic field is applied, the spins in Cu_2OSeO_3 arrange themselves into several distinct magnetic phases. These include a helical ground state, conical (**c**) and tilted conical phases (**d**), a skyrmion lattice phase, a low-temperature skyrmion phase (**e**), and finally a field-polarised state where all spins align with the field. Recreated from Ref. [3] under CC-BY-NC 4.0.

tens of nanometres, roughly seventy times the atomic lattice spacing.

By changing the temperature or applying a magnetic field, Cu_2OSeO_3 can switch between several of these different magnetic phases, each with its own characteristic arrangement of magnetic moments. At low temperatures, these phases become particularly interesting. The conical state has spins that wind along the direction of the applied magnetic field, while the tilted conical (TC) state shows a similar spiral but slightly angled away from the field [6]. This subtle tilt breaks the magnetic symmetry and gives rise to a small but measurable electric polarisation, making it especially sensitive to electric fields.

To explore these magnetic structures, we used small-angle neutron scattering (SANS) at the SANS-I beamline in SINQ

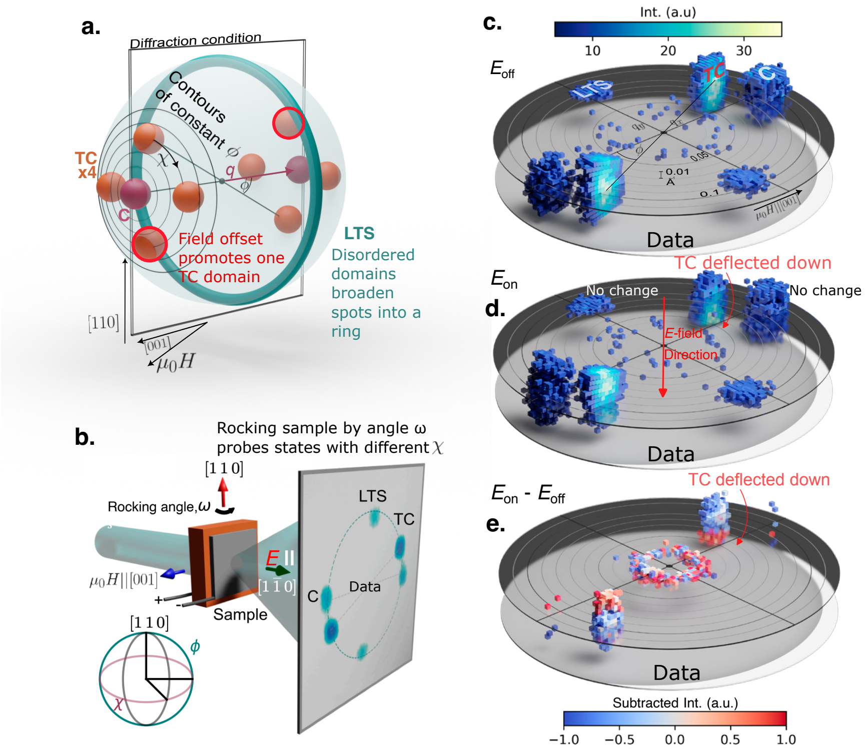

FIG. 2

Reciprocal space representation, experimental setup, and 3D tomographic SANS maps. a, Schematic showing how different magnetic phases in Cu_2OSeO_3 appear in reciprocal space, highlighting the directions of the applied magnetic field, the crystal axes, and how the detector "sees" these structures. **b,** Experimental SANS setup, showing the orientations of the magnetic and electric fields relative to the sample and the incoming neutron beam. A single detector exposure captures a slice of reciprocal space, while rotating the sample around the vertical axis (*ω*) allows a full 3D mapping, forming the basis of our tomographic measurements. **c,d,** Three-dimensional SANS maps at 5 K without (**c**) and with (**d**) an applied electric field of 2500 V/m. Each small cube (voxel) represents the intensity of neutrons scattered from a tiny volume in reciprocal space. The tilted conical (TC) state is highlighted by cutting vertically through its spot to show the electric-field-induced deflection. **e,** Difference map showing the clear trajectory of the TC wavevector as it shifts under the applied electric field. Recreated from Ref. [3] under CC-BY-NC 4.0.

(Experimental geometry shown in Fig. 2ab). Neutrons are ideal for this purpose because they carry their own magnetic moment, allowing them to interact with the magnetic periodicities directly. By mapping how neutrons scatter as we vary the direction of the sample, we can reconstruct the three-dimensional reciprocal-space of the underlying magnetic order.

Our results presented in Fig. 2c-e reveal something remarkable: when we applied an electric field, the tilted conical spirals physically changed their direction, shiftings towards the electric field. This effect, which we

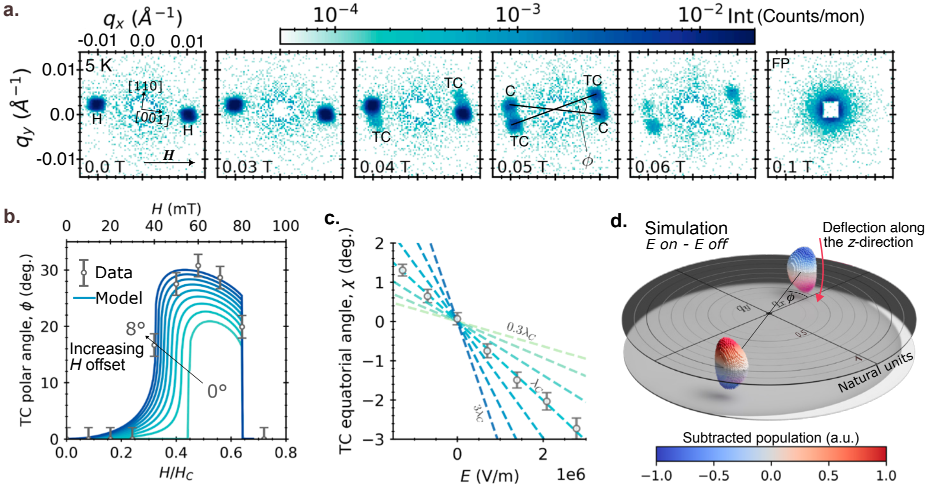

FIG. 3

Theory explaining how the spiral magnetic state tilts under an electric field.
a, Series of SANS images showing how the magnetic states change as the magnetic field increases: starting from the helical ground state, through a mixture of tilted conical (TC) and conical states, and finally reaching the field-polarised state at 0.1 T. **b,** Comparison of theoretical predictions (lines) with experimental measurements (points) for the tilt angle of the TC state as the magnetic field is varied. The model successfully reproduces the TC tilt for small deviations of the field from the [001] direction. **c,** The predicted size of the tilt depends on the saturation polarisation, λ_C, showing a linear trend near the experimentally measured value. **d,** 3D difference map in reciprocal space calculated from the theory, showing the expected tilt of the TC state under 0 and 2.5×10^6 V/m electric fields. Error bars indicate uncertainties from the model fit. Recreated from Ref. [3] under CC-BY-NC 4.0.

term magnetoelectric deflection, shows that an electric field can steer large-scale magnetic structures in a predictable and reversible way. In contrast, the conical and skyrmion phases remained unaffected, as these states carry no net electric polarisation.

This result marks the first experimental observation of a magnetoelectric deflection effect in a magnetic spiral. It provides a new way to manipulate magnetic textures without using electric currents or mechanical strain, an appealing prospect for developing ultra-low-energy magnetic control in future devices.

To understand why the tilted conical magnetic spirals in Cu$_2$OSeO$_3$ deflect when an electric field is applied, we developed a theoretical model that connects the microscopic interactions inside the material to the large-scale behaviour we observed experimentally.

In the material, the magnetic spirals arise from a delicate balance between several competing forces: the tendency of neighbouring spins to align (via the exchange interaction), a twisting force that prefers spins to cant slightly (known as the Dzyaloshinskii–Moriya interaction, [7]), and the influence of the external magnetic field. On top of these, weaker anisotropic interactions act like an internal “compass,” favouring certain crystal directions over others. When these factors

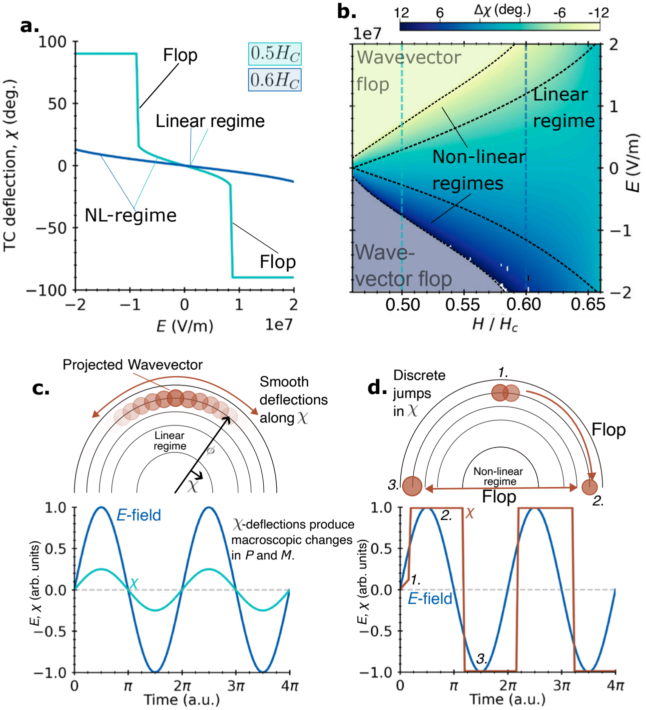

FIG. 4

How the magnetoelectric response changes with applied electric and magnetic fields. a, The tilt of the TC magnetic state changes with applied electric and magnetic fields. At low electric fields, the tilt changes smoothly in a linear way. As the electric field increases, the response becomes non-linear, and eventually, the magnetic direction suddenly flips into a new orientation corresponding to a different TC domain. This flip happens at lower electric fields when the magnetic field is weaker. **b,** Schematic diagram showing how the magnetoelectric response depends on both electric and magnetic fields. The dashed lines mark the boundaries between different regimes, estimated from numerical analysis. **c,d,** Illustrations of the two main behaviors. Semi-circles represent contours of constant tilt angle (Φ), similar to looking down the poles in Fig. 2a. In **c**, the linear regime shows the magnetic direction gradually deflecting along χ, c. Recreated from Ref. [3] under CC-BY-NC 4.0.

are combined, they stabilise the tilted conical state, a winding spiral that points slightly away from the magnetic field direction. Our model (Shown in Fig. 3ab) successfully reproduces how this state appears, evolves, and eventually collapses as the field is increased, matching the experimental phase behaviour with striking accuracy.

With this foundation, we then introduced an magnetoelectric coupling, the key link between magnetic and electric properties. In Cu_2OSeO_3, the electric polarisation is not fixed but depends on how spins are oriented relative to each other and their local atomic environment. When an electric field is applied, the system tries to align its electric polarisation with the electric field. However, doing so comes at an energy cost, since it requires the magnetic spiral to rotate slightly away from its preferred crystal direction. The resulting competition between these two effects (aligning electric polarisation with the electric field vs magnetic anisotropy) produces a small but measurable deflection of the spiral's propagation direction.

The model predicts that the deflection grows linearly with the applied electric field at low voltages, exactly as observed in the neutron scattering experiments (Fig. 3cd). From this relationship, we were able to estimate the strength of the intrinsic magnetoelectric coupling in Cu_2OSeO_3, which agrees very well with previous macroscopic measurements [8, 9]. This confirms that the deflection we observe is a genuine magnetoelectric effect, rather than a secondary strain or piezoelectric response.

Finally, by extending the model to stronger electric fields (Fig. 4), we uncovered an even richer behaviour. The simulations reveal that as the electric field increases, the deflection first becomes non-linear, and at sufficiently high fields, the spiral can "flip" into a new orientation that aligns perfectly with the electric field. This transition marks a regime where the electric control completely overcomes the crystal anisotropy, a tantalising possibility for future experiments and real-world applications.

In summary, through a combination of experiments and theoretical modelling, we discovered a new kind of magnetoelectric behaviour: the direction in which a magnetic pattern propagates can be gently deflected by an applied electric field. This effect arises from a subtle interplay between the crystal's built-in asymmetry and competing magnetic preferences within the material. Because this mechanism is quite general, it could appear in many other magnetic systems that share these basic ingredients. In the long term, such controllable coupling between magnetism and electricity could inspire new device concepts - and operate at room temperature in the right materials. For more details, please see our recent publication [3].

ACKNOWLEDGEMENTS

This work was supported by the UK Skyrmion Project EPSRC Programme Grant (No. EP/N032128/1, P.D.H/G.B), and the Swiss National Science Foundation project (No. 200021 188707, S.J.W). The work at the University of Warwick was also supported by EPSRC through Grant EP/T005963/1 (G.B/D.M). The SANS experiments were performed at the Swiss spallation neutron source SINQ, Paul Scherrer Institute, Villigen, Switzerland, under Proposal No. 20221453. M.T.L. acknowledges the financial support of the Science and Technology Facilities Council (STFC) and the ISIS Neutron and Muon Source in the form of an ISIS facility development studentship. We are grateful for the assistance of M. Bartkowiak for aiding with the set-up of the electric-field experiments. We gratefully acknowledge the provision of the MPMS3 in the ISIS Neutron and Muon Source Materials Characterisation Laboratory.

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Announcements

SGN/SSDN Members

Presently the SGN/SNSS has 315 members. New members can register online on our new SGN/SNSS website: http://sgn.web.psi.ch

SGN/SSSN Annual Member Fee

The SGN/SNSS members are kindly asked to pay their annual member fees. The fee of **CHF 20** can be paid either by bank transfer, Twint or in cash during your next visit at PSI. The bank account of the society is accessible for both Swiss national and international bank transfers: Postfinance: 50-70723-6 (BIC: POFICHBE), IBAN: CH39 0900 0000 5007 0723 6.

The SGN/SSSN is an organisation with tax charitable status. All fees and donations paid to the SGN/SSSN are **tax deductible**.

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PSI Facility News

Recent news and scientific highlights of the three major PSI user facilities SLS, SINQ and SμS can be found in the **quarterly electronic newsletter** available online under: https://www.psi.ch/science/facility-newsletter

News from SINQ

Please visit the page https://www.psi.ch/sinq/call-for-proposals to obtain the latest information about beam cycles and the availability of the neutron instruments.

Registration of publications

Please remember to **register all publications either based on data taken at SINQ, SLS, SμS or having a PSI co-author** to the Digital Object Repository at PSI (DORA): www.dora.lib4ri.ch/psi/
Follow the link 'Add Publication'.

Open Positions at SINQ and ILL

Open positions at SINQ or ILL are advertised on the following webpages:
https://www.psi.ch/pa/stellenangebote
https://www.ill.eu/careers/all-our-vacancies/?L=0

PhD positions at ILL

The PhD program of the Institut Laue-Langevin, ILL, is open to researchers in Switzerland. Consult the page:
https://www.ill.eu/careers/all-our-vacancies/phd-recruitment

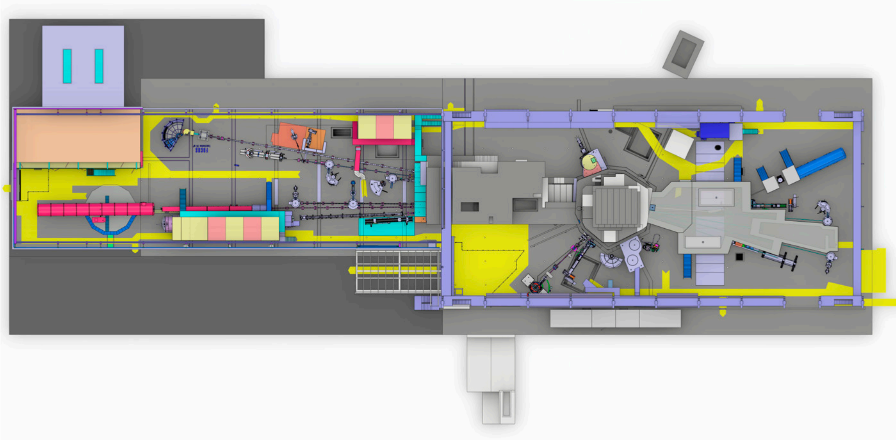
For information on the PhD program of ILL or get in contact with the managers of the program using the email address phd@ill.fr.

The Swiss agreement with the ILL includes that ILL funds and hosts one PhD student from Switzerland.

SINQ++ Workshop

29th - 30th April, 2026

Paul Scherrer Institute, Villigen,
Switzerland



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Conferences and Workshops

An updated list with online links can be found here: **http://www.psi.ch/useroffice/conference-calendar**

December 2025

MLZ User Meeting 2025
December 3-4, 2025, Bogenhausen (Munich), Germany

ErUM-Data Community: DIG-UM Annual Meeting 2025
December 4, 2025, 14:30 - online

Advancing Materials Science Through Synchrotron Radiation and X-ray Free Electron Lasers
December 8-13, 2025, Yokohama, Japan

January 2026

ADD2026 School and Conference on Real-Space Diffraction Data Analysis
January 11-16, 2026, Grenoble, France

Muon Spectroscopy School 2026
January 14-21, 2026, Rigi-Kaltbad, Switzerland

S3IC 2026: Single-Molecule Sensors and NanoSystems International Conference
January 19-21, 2026, Rome, Italy

KFN Webinar lecture by Ross Stewart (ISIS)
January 30, 2026, 11:00 (CET), online

February 2026

BVR57: PSI users meeting for particle physics 2026
February 3-5, 2026, Villigen, Switzerland

HERCULES European School 2026
February 22 - March 29, 2026, Grenoble, France

34th Annual Meeting of the German Crystallographic Society
February 25-28, 2026, Lübeck, Germany

KFN Webinar lecture by Pascale Deen (ESS)
February 27, 2026, 11:00 (CET), online

March 2026

MATRAC 2 School: Application of Neutrons and Synchrotron Radiation in Materials Science with Special Focus on Fundamental Aspects of Materials
March 1-6, 2026, Munich and Garching, Germany

Magnettage 2026
March 3-5, 2026, Aalen, Germany & Online

BioINSP2026: 8th International School and Conference on Biological Materials Science
March 4-6, 2026, Siegburg/Bonn, Germany and online

HIRES2026: Synergies in High Resolution Spectroscopy
March 10-13, 2026, Grenoble, France

Additive2026: 5th Symposium on Materials and Additive Manufacturing
March 24-26, 2026, Kassel, Germany and online

April 2026

Deep Learning School 'Basic Concepts' including career workshop and visit to Boehringer Ingelheim
April 13-17, 2026, Ingelheim, Germany

Gordon Research Conference (GRC) on Neutron Scattering
April 26 - May 1, 2026, Barcelona, Spain

SINQ++ Workshop
April 29-30, 2026, Baden, Switzerland

May 2026

SICT2026: International Conference on Surfaces, Interfaces and Coatings Technologies
May 6-8, 2026, Prague, Czech Republic

International Conference on Neutrons in Heritage Science
May 19-22, 2026, Munich, Germany

June 2026

17th Bombannes summer school on scattering applied to soft condensed matter
June 9-16, 2026, Bombannes, France

Neutrons and Food 8
June 15-19, 2026, Garching, Germany

XAFS 2026: 19th International Conference on X-ray Absorption Fine Structure
June 21-26, 2026, Chiang Mai, Thailand

PSI Master School 2026
June 22-26, 2026, PSI Villigen, Switzerland

EPDIC19: European Powder Diffraction Conference
June 23–26 2026, Crans Montana, Switzerland

August 2026

IUCr 2026: General Assembly and Congress of the International Union of Crystallography
August 11-18, 2026, Calgary, Canada

September 2026

Deep Learning School 'Advanced Concepts'
September 1-4, 2026, Kiel, Germany

SNI 2026: Deutsche Tagung für Forschung mit Synchrotronstrahlung, Neutronen und Ionenstrahlen an Großgeräten
September 8-10, 2026, Hamburg, Germany

IXS 2026: 14th International Conference on Inelastic X-ray Scattering
September 13-18, 2026, Argonne, IL, USA

16th XTOP Biennial Conference on High-Resolution X-Ray Diffraction and Imaginging
September 21-25, 2026, Karlsruhe, Germany

ESS–ILL User Meeting 2026
November 18–20 2026, Lund, Sweden

Minutes of the SGN/SNSS GA 2025

Hybrid meeting in the Auditorium at PSI and via Zoom

Date:	May 5, 2025, 15:00
Participants:	58 in Person and up to 14 online, including our guest, Giovanna Fragneto (ESS science director)

1
Welcome and approval of the Agenda

Marc Janoschek, president of the Swiss Neutron Science Society, warmly welcomed the participants and our guest, Giovanna Fragneto (ESS science director) to the 2025 General Assembly. The agenda was approved unanimously. Marc Janoschek noted that an online voting tool will be used for the three upcoming elections, namely that of the president, the confirmation of two current board members and the new board member to fill the vacant position.

2
Minutes of the General Assembly 2024

The minutes of the previous General Assembly, held on 27 May 2024 and published on the Society's Webpage (https://neutronscience.ch/society/assemblies) were approved without dissent.

3
Annual Report of the President

Marc Janoschek presented an overview of the Society's activities since the previous GA:

a) Modernization of our society, started at 2022 GA is completed:

- Membership model allows for "Institute Members" since 2023.
- As of 1 January 2024, SNSS became a member society of the Swiss Academy of Sciences (SCNAT), significantly increasing available funding opportunities.
- In December 2024, the Society launched our new logo and a redesigned Swiss Neutron News (No. 64). Special thanks were extended to Viviane Lütz-Bueno and Romain Sibille for leading this effort, as well as to Mahir Dzambegovic and his team from the PSI Communication Department for their contributions to the SNN redesign.
- The new SNSS webpage was launched in April 2025: https://www.neutronscience.ch

b) History of Swiss Neutron Science and SNSS:
Christoph Niedermayer has kindly agreed to prepare a historical account of the origins and development of Swiss neutron science and the SNSS. He is supported by Albert Furrer and Kurt Klausen. The first draft looks very promising and will be published soon on the Society's website and in the SNN. The President expressed his sincere thanks.

c) Membership and Contributions:
The Society currently counts 308 members, reflecting continued growth, although further expansion remains possible. Members were encouraged to promote SNSS membership, noting that international users of SINQ are also eligible to join.

Question (Michel Kenzelmann): how does the institutional membership works at PSI? Answer (Marc Janoschek): The entire Center for Neutron and Muon Sciences and several other groups at PSI are members, other PSI employees may join either as a group or as individuals.

d) SCNAT funding:
In 2024, the Society submitted its first SCNAT project funding applications for activities in 2025. Results were as follows:

- SINQ^{++} Workshop: 8000 CHF granted
- Workshop on Quantum Spin Ice: 2000 CHF In addition, she raised concerns regarding the closure of certain facilities: granted
- Financing of Neutron Instrumentation Award: not granted.

e) International Recognition:
According to an independent bibliometric evaluation by Martin Stankovski and Farhad A. P. Khotbehsara ("What is the size of the global light- and neutron source research communities? — Adventures in bibliography, Part I: Uncovering the global status quo", https://www.linxs.se/news/article-series-i/size-of-the-global-light-and-neutron-source-communities), the Swiss neutron science community ranks as the most successful per capita in the world during 2012-2021.

f) Update of the Swiss Neutron Science Community Roadmap 2024:
The updated Swiss Neutron Science Community Roadmap 2024 was published on December 18, 2024 (https://dx.doi.org/10.5281/zenodo.14265028).The SINQ Guide Upgrade (2019–2020) achieved a flux increase of 2–30×, depending on instrument and conditions. This improvement primarily serves to address new scientific challenges rather than merely to accelerate measurements. The Swiss Neutron Science Community continues to grow, as reflected by the increasing number of submitted proposals. However, the field is currently affected by a "neutron drought" - a reduction in available beam days due to the closure of several facilities. Current neutron provision stands at 55% of 2017 level, and without countermeasures this may become the new baseline by 2033 or earlier. This poses serious challenges for sustaining community growth and for training future neutron experts. The Swiss community is particularly affected by the European situation: oversubscription at SINQ has increased, while the success rate for swiss proposals at other facilities has declined. The Society's key mitigation strategy is the SINQ^{++} project, in which the first "+" refers to the improvement of the cold source and the second "+" denotes enhanced capability and capacity (see presentation by Jon White and Uwe Filges). Thanks to everyone involved.

4
Report of the Treasurer

The annual balance sheet for 2024 is presented: Assets SNSS/SGN on 1.1.2024: **CHF 11'367.89**

	Revenues[CHF]	Expenses [CHF]
Membership-fees (postal check acc.)	4'109.50	
Donations (postal check acc.)	100.00	
Expenses Postfinance account		82.00
Workshop (Crystal Growth)		1'000.00
Office costs		1'516.30
Other Expenses		610.45
Deposit Young Scientist Prize (Swiss Neutronics)	1'000.00	
Young Scientist Prize (Zhou, B.)		1'000
Total	**5'209.50**	**4208.75**

Net earnings 2024	**1'000.75**	

Balance 2024	**Assets [CHF]**	**Liabilities [CHF]**
Postfinance account	12'288.64	
Cash box	80.00	
Assets on 31.12.2024	**12'368.64**	

5
Report of the Auditors

Both Auditors (Dr. M. Zolliker and Dr. Daniel Mazzone, both from PSI) have examined the bookkeeping and the balance sheet for 2024. They have accepted it after correcting a small mistake. The participants unanimously vote for the release of the SNSS Board.

6
Budget 2025

The participants accept the budget proposal without objection

	Receipts [CHF]	Expenditures [CHF]
Membership-fees	5'240.00	
Interests	0.00	
Young Scientist Prize (in/out, SNAG)	1'000.00	1'000.00
SINQ^{++} workshop (in/out, co-financed by SCNAT)	8'000.00	10'000.00
Quantum Spin Ice Workshop (in/out, SCNAT)	2'000.00	2'000.00
Expenses Postfinance account		63.00
Fee ClubDesk Software for Membership Management		432.00
Fee webdomain		15.00
Fees SCNAT Membership (308*7 CHF)		2'156.00
Financing of poster awards/workshop aperos		2'000.00
Total	**16'240.00**	**17'666.00**
Total receipts 2025	**-1'426.00**	
Projected balance on 31.12.2025	**10'942.00**	

7
Elections and Composition of the Executive Board

Current board members:

- Marc Janoschek (PSI & UZH, president, 3 years)
- Andrea Carminati (ETHZ, member, 1 year)
- Fanni Juranyi (PSI, member and secretary, 2 years)
- Florian Piegsa (Uni Bern, member, 3 years)
- Romain Sibille (PSI, member, 2 years)
- Markus Strobl (PSI, member, multiple terms).

Further functions:

- Viviane Lütz Bueno (PSI, Editor Swiss Neutron News)

According to the Society's by-laws, the executive board is made up by the president and up to five additional members (https://www.neutronscience.ch/society/bylaws), each serving a three-year term.

Marc Janoschek announced the completion of his first term as President and, due to new professional commitments, will step down. He expressed his willingness to continue supporting the Society as an advisor.

Elections:

- President: For the first time, there were two candidates: Markus Strobl and Romain Sibille (both PSI and current board members). After the candidates introduced themselves, Romain Sibille was elected as the next president of the Society (67 votes, 55% Romain Sibille, 37% Markus Strobl, 7% Absention). Congratulations!
- Reconfirmation of board members: both Markus Strobl and Florian Piegsa whose three-year term had concluded, were re-elected as board members.
- New Board Member: Three highly qualified candidates stood for the open seat. Congratulations to Livia Bove (EPFL), who has been elected with 41%. The Society warmly thanks the two other candidates: Andreas Borgschulte (EMPA) and Johanna Nordlander (UZH) for their enthusiasm and commitment to SNSS. They received 30% and 25% of the votes, respectively, with 5% abstentions.

Marc Janoschek expressed his gratitude for three fruitful and inspiring years as President, thanking the Board for their collaboration and wishing the new leadership continued success!

8
News from

a) UCN

(Bernhard Lauss):

At the Ultracold Neutron Source (UCN) of PSI, 2–3 beam ports are currently used for fundamental physics experiments exploring neutron properties. The EZE-UCN project is underway to replace the aging central unit. The n2EDM experiment will improve the precision of the measured electric dipole moment of the neutron by one order of magnitude. A further tenfold increase in precision is anticipated in the follow-up n2EDMagic experiment. These results may help rule out several theories explaining the matter–antimatter asymmetry of the universe. The τ-SPECT experiment, measuring the neutron lifetime, also continues successfully, contributing to models of light-element formation after the Big Bang.

b) SINQ

(Michel Kenzelmann (Head of LNS, PSI) / Jon White):

Despite technical downtime affecting some aging instruments, SINQ ran a successful user program in 2024. Upgrades of Neutra and Poldi have started and SANS-LLB is expected to begin hot commissioning in summer 2025. Diana Quintero Castro, Douglas Fabini and Jakob Lass started as tenure track scientists at Eiger, DMC and CAMEA, respectively. Christof Niedermayer, and Lukas Keller retire(d) this year. LNS has new group leaders: Daniel Mazzone / Solid State Dynamics and Fanni Juranyi / Soft Matter a.i. LNS hosted many summer students and will soon appoint a new tenure-track scientist in soft matter. Beam reliability remained above 90%, maintaining the facility's high operational standard. The proposal overbooking factor was close to 3, reflecting strong demand. User feedback continues to be positive, highlighting excellent technical and scientific support; minor complaints concern catering services. The number of publications, which dipped after the SINQ Upgrade, have now rebounded, especially given that not all instruments are yet back in operation. SINQ is running several international projects: WARP (high-res. CAMEA-type spectrometer) (R'Equip, EPFL, ILL); Horizontal-field magnet with wide-angle access (R'Equip); ILL-PSI collaborations on detectors (ILL contract); RAL-PSI collaboration (SERI); ESS instruments; Networking within LENS.

c) ENSA

(Marc Janoschek):

SNSS and PSI jointly applied to carry out ECNS 2027 in Basel, but ENSA decided that it will be hosted by the ILL. The article “Rendering the European neutron research landscape” is published in Nature Scientific Report. It reports on a new semi-supervised learning method to render the European neutron community of scientists and “tell where neutron-scattering scientists are, and what they do”. Evgenii Velichko and Lambert van Eijck at the TU Delft Reactor Institute developed the method, with 21 ENSA delegates collaborating to supervise the learning. ENSA is currently preparing a position paper expressing the European user community’s perspective on ensuring the sustainable future of neutron science in Europe.

d) ILL

(Marc Janoschek):

On 6 June 2024, State Secretary Martina Hirayama signed an agreement on behalf of the Federal Council renewing Switzerland's participation in the Institut Laue-Langevin (ILL) in Grenoble (France). Following this, the Swiss Parliament increased the national funding commitment from 12 MCHF to 26.4 MCHF, securing Swiss access until 2033. A collaboration by UZH and the CEA-CRG funded by SERI has been renewed. This collaboration enables Swiss researchers to obtain additional beamtime on the CRG instruments IN12, IN20 and D23. On 27 November 2024, the ILL celebrated completion of the endurance program, which achieved tenfold increase in count rate, provided 7 new instruments, and rebuild 5 more instruments. The renewed Swiss membership will fund three new PhD positions at the ILL over the coming years. The first call will be opened in the next few weeks.

e) ESS

(Artur Glavic, ESS project manager):

The Swiss contribution to ESS amounts in total 165.6 MCHF (~3.5% until 2027). The cost of in-kind instruments fully provided by PSI is 34 MCHF. PSI has following contributions: ESTIA 100%; ODIN 35%; BIFROST 35%; MAGIC 15%; HEIMDAL 35%. Odin and Bifrost is expected to be ready in autumn 2025, before Beam-On-Target. Estia’s hot commissioning is expected in early 2026, the rest in 2027. Swiss in-kind contributions include polarization systems (MAGIC), guides and analyzers (BIFROST), and guides and detectors (HEIMDAL, currently in manufacture). The Swiss neutron community is invited to engage as friendly users after hot commissioning.

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Update on the SINQ^{++} Project

(Jon White / Uwe Filges)

The Vision of the SINQ^{++} Project is to maximize the scientific output and impact of SINQ by delivering higher performance and broader experimental capabilities. Its scope is the optimization of the SINQ source (+) and expanding science capabilities including extended instrument suite (+). Particular emphasis will be placed on strengthening activities in Applied Materials, Soft Matter, and industry-related research (e.g., isotope production and irradiation), and on addressing the evolving needs of Swiss researchers. The project realisation is foreseen for 2033-2036. Pre-study was done in Q4 2024. Currently we are in the pre-project phase, which included cunsultation with external experts. The project will be promoted at the ICNS 2025. Further, a workshop is planed with external experts and stakeholders towards the end of the year. The project is a common effort of LIN and LNS labs at PSI - thanks to all people involved!

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Guest Presentation: Status of ESS and New Instrument Call

(Giovanna Fragneto, ESS)

For the first time, the SNSS General Assembly welcomed an external guest speaker. Giovanna Fragneto, a soft-matter scientist and Science Director at ESS, recognized the potential and expressed her support for expanding SINQ's activities in the field of soft matter. In addition, she raised concerns regarding the closure of neutron facilities. ESS is making strong progress: Beam-On-Dump is expected very soon, Beam-on-Target will follow within a year. First instruments will be ready by then for hot commissioning, with others to follow sequentially. Beyond instrumentation and facility development, ESS aims to strengthen engagement with user communities through topical workshops and a friendly-user program. Giovanna Fragneto emphasized the open Call for community contributions to the ESS Instrument Roadmap. European teams are encouraged to submit conceptual proposals for future instruments to complement the 15 approved instruments. The call remains open until 3 February 2026.

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Varia

Marc Janoschek thanks for attending and opens the Apero.

Notes

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