

# Charter

of the

## League of advanced European Neutron Sources

### (LENS)

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#### I. Preamble

Solving the grand challenges facing our societies often requires the development of new high-performance materials. Tailor-made materials and material systems are required for all key technologies, from information technology, renewable energy concepts to more environmentally friendly transport systems and medical applications. Many of these will be synthesized on the atomic or molecular level. This requires state-of-the-art, high-resolution (and often also in-situ/in-operandi) analytical methods to control the processes in a reliable manner, and to provide experimental data to the digital modelling of the real world. Neutron probes are one of the pillars of analytical techniques and are - due to the characteristics of neutrons - especially suited to investigate magnetic properties, light elements or big samples. These characteristics are advantageous for addressing scientific questions arising from grand societal challenges. Thus, neutron based analytical facilities are used in numerous disciplines across the entire range of science and technology development and generate a high socio-economic impact. Europe has achieved global leadership in this field. The European and the different national neutron sources serve a very broad scientific community, with more than 5.000 researchers and over 32.000 instrument days in Europe.

**With respect to the important role of neutron science for the society, the neutron user facilities in Europe that offer a transnational user programme have decided to establish a strategic Consortium - the League of advanced European Neutron Sources, in order to create an even more effective ecosystem of collaborating neutron sources.**

## II. Declaration

### Principles

- Building on the European lead in neutron science,
- Realizing that in order to maintain this lead, services have to be improved and adapted continuously to the needs of the user community,
- Recognizing that in a highly competitive environment this task requires the optimization of resources and, therefore, close coordination of policies among the facilities,
- Being conscious of the fact that such coordination is a declared priority of the European Research Area,
- Appreciating the need for a common representation and impact promotion,
- Taking into account the advent of the European Spallation Source ESS,
- Acknowledging the need to maintain a suitable level of capacity across the international (ILL and ESS) and major national facilities (ISIS, MLZ, SINQ, BNC, IFE) in order to support the needs of the European scientific community
- Recognizing the need for a functioning ecosystem of cooperating international and national sources,

with LENS, the undersigning European neutron facilities herewith declare their intention to set up a strong cooperation. It is open to any neutron provider in Europe exhibiting an open international user programme for the majority of the beamtime provided and adhering to LENS' principles by signing this declaration.

### Goals

It is the aim of LENS to facilitate any form of activity that has the potential of strengthening European Neutron Science via enhanced collaboration among the facilities. In this context LENS places particular emphasis on the interaction with user communities and funding organizations and their representatives.

The members of LENS, in particular, commit to:

- Engaging in the common promotion of neutron science with the objective of establishing neutron science as a recognized brand with all the stakeholders, and outlining the scientific and socio-economic impact of neutron science;
- Coordinating their exchange with national and European organizations and stakeholders (including users and funders), with the objective to contribute to shaping future policies;
- Coordinating the technical development strategies in order to profit best from the collective expertise and to avoid duplication of efforts, in order to address the scientific and societal challenges of the future in the most efficient manner;
- Joining efforts in expanding existing and supporting new user communities both by topic and geographic origin, with the objective of strengthening Europe's neutron expertise;

- Concertation of access based on the principles of the *European Charter for Access to Research Infrastructures*<sup>1</sup> with an emphasis on standardization for the benefit of the user experience;
- Achieving greater coherence in the development of data-policy, -handling, -storage, -analysis, -access along FAIR<sup>2</sup> principles and the promotion of Open Science while preserving intellectual property rights, with the objective of facilitate data exchange and use of neutron research data over a broad range of scientific areas;
- Coordinating training activities and enhancing staff qualification by facilitating staff mobility, with the objective to facilitate international career paths and developing skills in neutron science and neutron technologies;
- Facilitate industrial access and collaboration, with the objective to fostering innovation in the European Research Area;

### Engagement

The members are fully committed to achieving the above-mentioned goals. LENS reviews progress towards its goals on a yearly basis. It makes sure that its actions are broadly disseminated.

Decisions are taken on a consensus basis. The members will always endeavour to find the highest common ground on all issues of common interest. LENS recognizes the differences in business models of its members and refrains from any action that could harm the interests of its members.

### Governance

LENS is represented by its General Assembly. Statutes and rules of procedure determine the details.

The General Assembly meets at least twice a year and elects by simple majority a chair and vice chair among the delegates.

The Chair may represent LENS with respect to third parties.

The General Assembly establishes its statutes and rules of procedure throughout the first year.

The General Assembly agrees on actions and has recourse to standing or ad-hoc working groups for their execution.

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<sup>1</sup> [https://ec.europa.eu/research/infrastructures/pdf/2016\\_charterforaccessto-ris.pdf](https://ec.europa.eu/research/infrastructures/pdf/2016_charterforaccessto-ris.pdf)

<sup>2</sup> <https://www.nature.com/articles/sdata201618>

Done at Vienna, 12 September 2018



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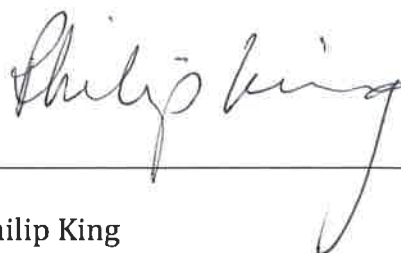
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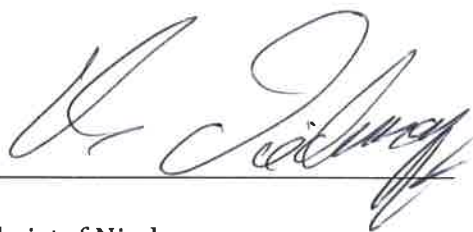
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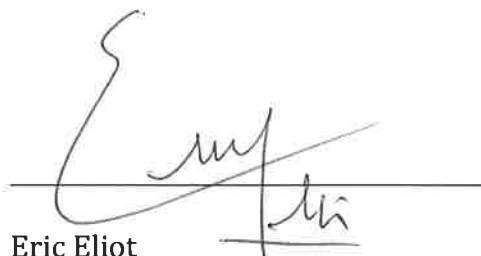
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