

CALL FOR PROPOSALS 2024

HELMHOLTZ Software Award

By the [Helmholtz Data Science Academy \(HIDA\)](#), the [Helmholtz Federated IT Services \(HIFIS\)](#), the project [HIRSE PS](#), and the [Helmholtz Open Science Office](#)

A. Aim of the Award

Software is one of the most important tools of modern science, and the development of research software is often a prerequisite for cutting-edge research. At the same time, software is an important outcome of research itself, but does not yet receive the necessary attention and reputation in the scientific community. Better attention and recognition also increase the motivation for subsequent use and opens up new opportunities for technology transfer.

There are countless software projects in the Helmholtz Association, many of which produce outstanding research achievements. The **Helmholtz Software Award** aims to promote the development of professional and high-quality research software and to recognize the commitment to software as the basis of modern Data Science. The award will put the spotlight on sustainable development and operation of research software, collaboration between software developers and will help making research software available for re-use.

B. Target Group

The Helmholtz Software Award is granted to **Helmholtz scientists, engineers and teams** (including PhD students) developing outstanding software solutions that meet the following conditions:

- Helmholtz has a substantial share in the project,
- at least one of the PIs (or maintainers) responsible for the software is employed by or affiliated with the Helmholtz Association,
- The research software is actively used by a community of practice.

C. Scope and Object

Software applications and scientific communities are very diverse, so a single award cannot cover the entire variety.

To ensure that this potential is fully exploited, different aspects of research software development are recognized and the prize is awarded in three categories:

1. **Best Scientific Software**

This prize is awarded for the innovative contribution and the scientific results achieved with the software.

2. **Sustainability**

This prize is awarded for software that is sustainable in the sense of software engineering according to the FAIR principles and for extensive support and participation of the scientific community.

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3. Newcomer

This prize is awarded for young software solutions with great potential and a visible growth rate in application. It can be of particular interest to doctoral students or junior research groups.

The winners receive one-off prize money that they can use for their own purposes: The prize for the best scientific software is endowed with 5,000 euros, the sustainability prize with 3,000 euros, and the newcomer prize with 2,000 euros.

Which software is eligible for participation in the competition?

- Helmholtz has a substantial share in the project (Helmholtz as a leading partner).
- The software is already demonstrably in use in a community.
- The software is cited in at least one scientific publication.
- The software must meet the conditions of professional software development according to the FAIR criteria.
- The software is registered in the [Helmholtz Research Software Directory](#) (RSD).

Evidence that these criteria are met is provided in the application documents as well as the information in the Helmholtz Research Software Directory (see section D).

D. Application

The application is structured as a two-stage process:

1. Each Helmholtz center may nominate a **maximum of three suitable candidates** to this call. These candidates, with software name and contact persons, must be submitted **by the center's Management via e-mail to open-science@helmholtz.de by 20 October** (see section F).
2. The candidates selected by their center will then be invited by the organizing committee of the Helmholtz Software Award to provide documentation pertaining to their bid **via the proposal management platform ProMeta-IVF (ivf.helmholtz.de) by the 31 October** (see section F).

The proposal must include the following documents:

- Cover sheet with the following information
 - Name of the software and contact details of the main contact person of the team
 - Helmholtz center(s), institute(s)
 - Classification according to the Helmholtz research fields
 - Keywords
- Reference to the related entry in the Helmholtz Research Software Directory (RSD, helmholtz.software)
- The following attributes are mandatory:
 - Software DOI
 - All contributing organizations must be referenced
 - Description
 - Contact person in the RSD
- Letter of motivation from the applicant, showing the potential and prospects of the SW (max. 3000 characters, font Arial, size 10, spacing 1.5). Please address all of the following topics in the letter of motivation:

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- What benefits does the software have for research, i.e. what concrete challenges can it solve or which use cases does it serve?
 - In what context was the software created (group, person etc.) and what role did Helmholtz play in that process?
 - How sustainable is the development and engineering of the software ([FAIRness](#))?
 - What is the main task that the software can perform?
 - Who is the target group for the software?
 - Which specific users or customers are already using the software in their research (or otherwise)?
 - What are the strengths of the project in relation to the three award categories (scientific value, sustainability, and newcomer)?
- List of publications citing the software (max. 5 most important) or reference of such a list in the RSD.

Note: The application should not be tailored explicitly for one of the three categories, but may highlight particular strengths in these areas.

The review panel must be granted read access to the software repository.

E. Selection Process

After the submission deadline, acceptance is checked against to the following formal criteria:

- The applicant is employed by or affiliated with the Helmholtz Association,
- The applicant was nominated as a candidate by their center,
- The documents and required information are complete and meet the formal criteria,
- An entry in the Helmholtz Research Software Directory with the essential information is available (based on the status at the time of the submission deadline).

The award winners are selected based on an evaluation by an international panel of experts and, in a second step, by a review board of experts from all Helmholtz research fields, the Helmholtz Open Science Office and the Helmholtz Information & Data Science Incubator.

A personal presentation of the candidates is not planned.

F. Timeline

- 27.08.2024** Publication of the call
- 20.10.2024** Deadline for the nomination of a maximum of three candidates per center (by e-mail to open-science@helmholtz.de)
- 31.10.2024** Deadline for the application via the application platform (ivf.helmholtz.de)
- 2025** Presentation of the Helmholtz Software Award. The time and place of the award ceremony will be announced in good time.

If you have any questions or suggestions regarding the award, please contact us at open-science@helmholtz.de.