



Call on *Science in your own Language*

CHIST-ERA is exploring the opportunity of launching a multilateral call on Machine Translation focusing on scientific documents: *Science in your own language*.

E.g., would an automatically translated scientific article be accepted at a top tier conference? Because the reasoning of an article can be dramatically altered by a single translation error, the topic encompasses several scientific challenges: Translation of complex documents (graphs, images...) with intricate cross-references, terminology and phraseology issues, document level translation, scientific domain adaptation etc.

Besides, the strategic objectives of the call are:

- i. Promote multilingualism in science;
- ii. Support open evaluation methodology and experiment reproducibility.

Research funding organisations from Europe and beyond are welcome to join CHIST-ERA and participate in the call (contact: chistera@anr.fr).

Multilingualism in Science

With the topic *Science in your own language*, CHIST-ERA joins the agenda of [UNESCO](#), the Coalition for Advancing Research Assessment ([CoARA](#)) and [Helsinki Initiative](#) to “promote multilingualism in scholarly communication”.

Advances in translation technologies offers an unprecedented opportunity to grasp the potential of multiple languages in Science:

1. Open science to the citizens and the society;
2. Take on board all research works whatever their language;
3. Value research with regionally or nationally targeted impact;
4. Make creativity and reasoning in research benefit from all language subtleties.

Researchers and citizens from English speaking countries also value the rise of such technologies, because science embraces an important share in non-English languages. By contributing to making access to science universal, multilingualism is aligned with the objectives of the ongoing Open Science transformation of the scientific landscape.

With more than 30 national or regional research funders on board, CHIST-ERA is well positioned to tackle this ambition.

Open Evaluation Methodology & Experiment Reproducibility

The systems and technologies developed by the funded projects to approach the objective of the call should be evaluated and ultimately compared.

Objective evaluation is not a triviality in Machine Translation, as in any other knowledge processing domains, and requires an in-depth expertise. While the research community has already, and with great success, endorsed this framework, its public support is still nascent in Europe, in spite of its demonstrated efficiency in terms of research management (see box below).

For the past decade, CHIST-ERA has supported technology evaluation by promoting open evaluation methodology and experiment reproducibility in its yearly call. With this call, it aims at further deploying this ambition:

Standard Call + Technology Evaluation Instrument

A dialogue with the research community will be established to identify, in addition to the scientific objectives of the call, the metrics and protocols that will form the evaluation instrument.

The benefits of focusing also on the Technology Evaluation Instrument in addition to the call are:

- S&T targets are made explicit and shared by the community;
- Selection of risky approaches is facilitated (they will be evaluated anyway);
- Comparability of technologies and technology transfer;
- Fostered exchanges between the researchers;

It has broader impacts beyond its duration at the level of the research community:

- Experiment reproducibility;
- Open Access to evaluation methodologies, reference and possibly large data sets.

*“This method, a research management technique developed in the 80s and applied increasingly widely since then to support long-term R&D, is arguably responsible for the success of all modern AI research”
(M. Liberman, CHIST-ERA Scientific Advisory Board).*

CHIST-ERA in Brief

CHIST-ERA is a network of research funders that supports use-inspired basic research on future and emerging digital technologies. It selects every year two new topics of emerging importance and launches a call for transnational research projects. It is itself supported by the European Innovation Council (EIC) of Horizon Europe through the ERA-NET funding scheme.