swissuniversities

Programme Open Science II

Call for proposals: ORD Explore - Innovative Areas

List of Approved Projects

Call Deadline: 02.03.2025

Decision by the Delegation Open Science: 23.06.2025

Overview Approved Projects Call ORD Explore - Innovative Areas

Short title	Full title	Leading institution	Partner institution(s)	Project Manager	Total costs (CHF)	Funds requested (CHF)
GALAXY-CH	Swiss Galaxy pilot instance for transdisciplinary, reproducible, open science, promoting national resources	ETH Zurich	Universität Basel, UNIGE, UNIL, DaSCH, SIB, Switch, SNSF, FMI	Gunnar Rätsch	400’000	200’000

Short Summary of the Project

Abstract by the applicants:

GALAXY-CH

Swiss Galaxy pilot instance for transdisciplinary, reproducible, open science, promoting national resources

Many researchers across Switzerland struggle with the steep learning curve of computational tools and high-performance compute (HPC) infrastructures. These challenges create significant barriers to entry. At the same time, reproducibility remains a major concern in research involving computational analyses. Differences in software versions, dependencies, data accessibility, and computational resources often lead to inconsistencies in results, making it difficult to validate and build upon previous work.

The web-based and open-source Galaxy platform constitutes a promising solution to address these issues. Originally developed for life sciences, it provides an intuitive interface for data analysis and access to HPC, enabling researchers to conduct complex analyses without requiring programming expertise. Its standardized workflows ensure that analyses can be easily reproduced and shared, fostering transparency and reliability in scientific research. It also allows to easily interconnect a large variety of research tools. It is a successful platform in the European and international research landscape with an active community.

This project aims at establishing a Swiss Galaxy pilot instance and integrate key open software tools developed in Switzerland. By doing so, it will democratize access to advanced computational methods, enabling researchers across diverse fields—including life sciences, astrophysics, and the humanities—to perform cutting-edge analyses without requiring specialized computational expertise. At the same time, it will enable impactful “made in Switzerland” tools to be deployed on existing Galaxy instances abroad. By leveraging the multidisciplinary expertise of the project’s partner institutions, this initiative will reinforce Switzerland’s position at the forefront of open, transparent, and reproducible computational research.