



SCIPION

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WHAT:

Application Framework to help the Structural Biology community to process Cryo Electron Microscopy (Cryo-EM) data.

FOR WHO:

Researchers; Pharma Industry.

ACCESS:

<https://www.eosc-synergy.eu/results/2384>

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Description

Scipion is an application framework to help the Structural Biology community to process Cryo Electron Microscopy (Cryo-EM) data.

The Scipion on demand service provides researchers with a ready to use installation where they can continue processing data acquired at a microscope facility. The service is initially offered to ESFRI INSTRUMENT users, however, the transparent use of EOSC computing services makes it possible to scale the service to wider communities.

Target audience/beneficiaries

Researchers in Structural Biology, including users of the ESFRI INSTRUMENT community, other Cryo-EM collaborations, pharma partners.

Benefits

Thanks to this innovative service, which can be deployed both on powerful hardware resources or on elastic clusters making efficient use of resource allocation, users with no computational background or lacking powerful hardware resources will have access to the latest tools for Cryo-EM through easy to use IaaS as well as to powerful computational resources. The advantage of Scipion is that no other web tool offers all the same functionality and that the service can be deployed seamlessly on the EOSC as well as on public clouds.

Use and Impact after EOSC Synergy

Cryo-EM is already having a deep impact in basic science; more recently it's started moving, in a limited manner, to work directly with human samples so that structural analysis applied to specific pathologies can be performed. This will open up new possibilities to biotech and pharma companies.

Scipion is a desktop application providing access to IaaS and is promoted through ESFRI INSTRUMENT mailings, tailored courses, and web sites. The service can additionally be used as a training tool.

During the EOSC Synergy project, Scipion was presented to community events in Autumn 2020 (Presentation on EGI Conference 2020 - Towards FAIR CryoEM workflows in EOSC) and spring 2021 (Presentation on Instruct-EOSC Forum).