EGI Community Forum 2015

Tuesday, 10 November 2015 - Friday, 13 November 2015 Villa Romanazzi Carducci

Scientific Programme

Abstract submission deadline: Sunday, 19 July 2015 (extended)

Nowadays, research practice is increasingly and in many cases exclusively data driven. Knowledge of how to use tools to manipulate research data, and the availability of e-infrastructures to support them, are foundational. Along with this, new types of communities are forming around interests in digital tools, computing facilities and data repositories.

By making infrastructure services, community engagement and training inseparable, existing communities can be empowered by new ways of doing research, and new communities can be created around tools and data. The EGI Community Forum aims at gathering tool developers, infrastructure providers, data providers and research communities to work together towards open science.

We solicit your contribution on the following topics.

Community Engagement and Innovation

Scientific communities, small research groups and private research need world-class e-infrastructures for high-quality, data-driven research and innovation. This track aims to discover the requirements of the research community, from large collaborations to the long tail of science, to enable the co-design of services and to drive the evolution of existing e-infrastructures.

This track focuses on:

- (i) common and community-specific ICT requirements and solutions for international collaborations and the long tail of science;
- (ii) outreach strategies for the long tail of science;
- (iii) discoverability and provisioning of data and services for the long tail of science;
- (iv) building communities of scientific applications and tools, software co-development;
- (v) training and education of data scientists;
- (vi) services, business models and pricing structures for the private sector.

Virtual Research Environments

This track covers tools and applications for the development, creation and provisioning of Virtual Research Environments (VRE) and their key enabling technologies. VREs provide custom environments that connect and abstract infrastructure resources for discipline-specific data and compute intensive applications. VREs enable convenient access to grid, cloud, data applications and collaborative services.

This track focuses on:

- (i) requirements, prototypes and solutions for community tools, applications and datasets;
- (ii) development and provisioning of innovative VREs;
- (iii) transforming applications into new business opportunities.

We open a call for existing datasets, community tools and solutions for the provisioning of innovative services on the EGI HPC and Cloud platforms, to enable communities to become the

engine of EGI innovation through co-development and co-provisioning.

Data and Computing

We look for contributions addressing dstributed data and computer intensive research based on HTC, Cloud IaaS, PaaS and SaaS. The EGI Federated Cloud platform delivers a cloud Infrastructure-as-a-Service (IaaS) platform and a high throughput computing (HTC) platform coupling computing and data. We would like to investigate how research and education can realise the full potential of these.

This track focuses on:

- (i) open access, sharing, discoverability, accessibility, interoperability, reusability, curation and preservation of data;
- (ii) HTC and cloud computing with big data and active repositories;
- (iii) accelerated computing for data intensive analysis, accelerated computing-as-a-service;
- (iv) data storage, compute and data interoperability, bulk data transfer, real-time data acquisition;
- (v) data licensing and privacy.

Identity provisioning, Authentication, Authorisation and Accounting

An integrated authentication, authorisation and accounting infrastructure is key to enable new and existing researchers to use e-infrastructures and to collaborate. This track will collect requirements and experiences in this area from user communities, services and identity providers.

This track focuses on:

- (i) policies for federating identity providers and attribute authorities;
- (ii) use cases in attributes management, translation of attributes and credentials, and integration with existing EGI services;
- (iii) application of AAI technologies to the management of distributed collaborations;
- (iv) single-sign-on (SSO) solutions to bridge multiple e-infrastructures, other integration strategies, cross-e-infrastructure workflows;
- (v) requirements for usage accounting, status and implementation of existing solutions.

Open Science Commons

Open science refers to the opening of the creation and dissemination of scholarly knowledge to a wide range of stakeholders, from professional researchers to citizen scientists. Opening the process of creation and dissemination of science requires changes in the way resources are shared and governed.

This track focuses on:

- (i) opening access to research data through an Open Science Cloud;
- (ii) community platforms and tools for reproducibility of scientific results;
- (iii) requirements and best practices for open science from the researcher's point of view;
- (iv) insights that can be gained from existing citizen science projects;
- (v) policies, governance, regulatory frameworks and roadmaps for Open Science.