

# Introduction to Jupyter and Open Science - Training

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ASNET-AM

## Introduction

**EGI Notebooks** is a services of the **EGI e-infrastructure**, providing a user-friendly and highly flexible Jupyter-based web environment for the development and execution of data analysis and visualisation 'notebooks'. Notebooks can contain programming codes in various languages, HTML scripts, dynamic visualization, equations as well as images and explanatory text to provide guidance and context for the analysis. Through notebooks users can easily share concepts, ideas and working applications, capturing the full analytical methodology, connections to data and descriptive text to interpret those data. Binder one can turn Jupyter notebooks reproducible and reusable by anyone, anywhere. Zenodo is an open access repository for research publications, scientific data and other 'research objects'. Jupyter, Binder and Zenodo are pillars of Open Science.

This tutorial will introduce Jupyter, the EGI Notebooks service together with Binder, Github and Zenodo. The tutorial will go through steps of using and combining these services to implement Open Science. Participants will experience the services through hands-on exercises and can continue using these services after the training through the [European Open Science Cloud](#).

## Target audience

The tutorial is of introductory level and is relevant for researchers, and for programmers, IT-service providers who support research and education. The event does not require knowledge of any programming language, but knowing Python or R is a benefit.

## Infrastructure for the tutorial

Participants will access services from the European Open Science Cloud and from other community websites from their own laptops. Participants have to bring an Internet-enabled laptop with a Web browser to the event.

Registration

The tutorial is free of charge. Please register using the following link: <https://events.geant.org/event/2/manage/registration/5/> Your application will be evaluated by the organisers.

Note that the [EaPEC conference](#) requires a separate registration.

## Information about the tutors

The tutorial will be given by members of the EGI Foundation, the institute that coordinates the EGI EGI infrastructure on behalf of the participants of the EGI Council: national e-infrastructures and European Intergovernmental Research Organisations (EIROs). The EGI infrastructure [offers various types of services](#) for advanced computing.

**Gergely Sipos** works as Customer and Technical Outreach Manager for the EGI Foundation. He coordinates EGI's engagement programme and supports researcher communities and educators from academia and industry in tackling big-data and big-compute challenges using state of the art services from the EGI community. Gergely holds an MSc and a PhD in computer science and project management from the University of Miskolc, Hungary. Since 2018 Gergely coordinates engagement, support and service provisioning for Research Infrastructures in the [EOSC-hub project](#).

**Giuseppe La Rocca** works in the USer Community Support Team of EGI.eu. He has a master degree in Computer Science Engineering from the University of Catania. Prior to EGI, Giuseppe worked as technologist at the Italian National Institute for High Energy Physics (INFN). During this experience he worked in training and user support in several projects co-funded by the European Commission in the context of the FP6, FP7 and H2020. Since 2010

## Agenda

9:00-10:30 Introduction to Jupyter and EGI notebooks (talk and hands-on)

10:30-11:00 Break

11:00-12:30 European Open Science Cloud & Open science with Notebooks and Binder (talk and hands-on)

## Materials

All the materials presented at the event are available at <http://go.egi.eu/eapec2019>