WOSSL - Workshop on Open-Source Software Lifecycles Introduction

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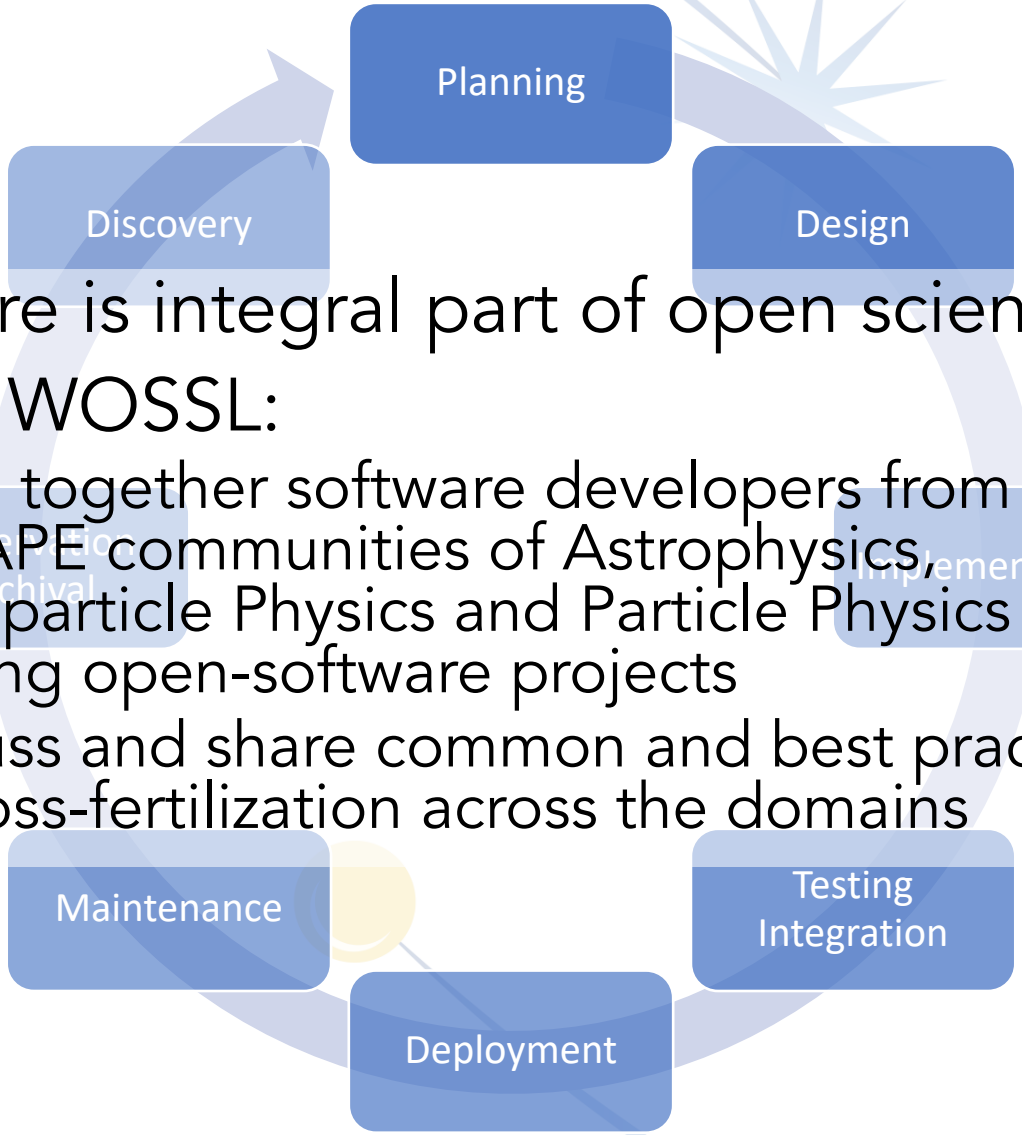
ESCAPE - The European Science Cluster of Astronomy & Particle Physics ESFRI Research Infrastructures has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement n° 824064.

Software Lifecycles



- software is integral part of open science
- aim of WOSSL:
  - Bring together software developers from the ESCAPE communities of Astrophysics, Astroparticle Physics and Particle Physics and leading open-software projects
  - Discuss and share common and best practices ⇒ cross-fertilization across the domains

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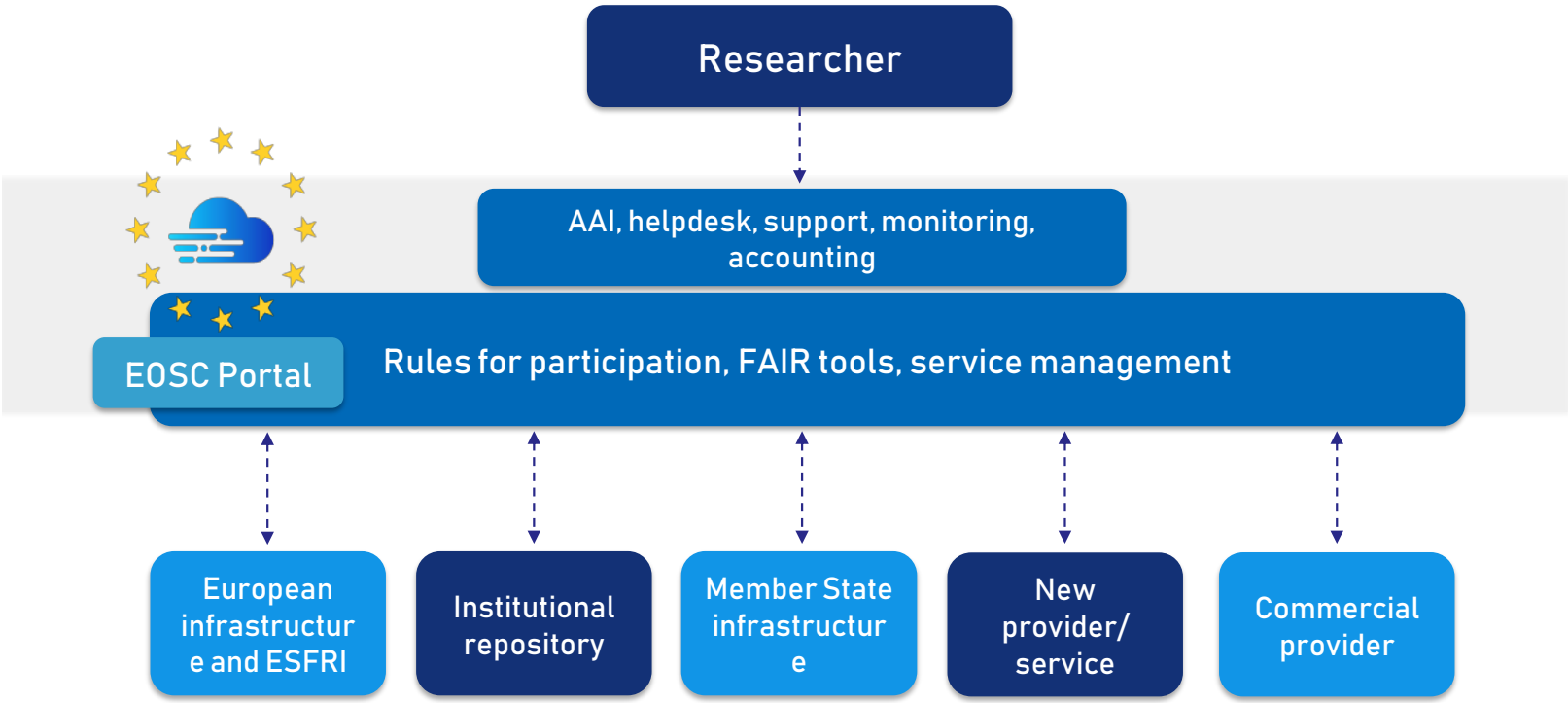
About EOSC …

EOSC portal: a universal gateway to EOSC services



C. Pascu – https://indico.in2p3.fr/event/20203/contributions/79182/attachments/57544/76944/EOSC_for_ESCAPE_.pdf

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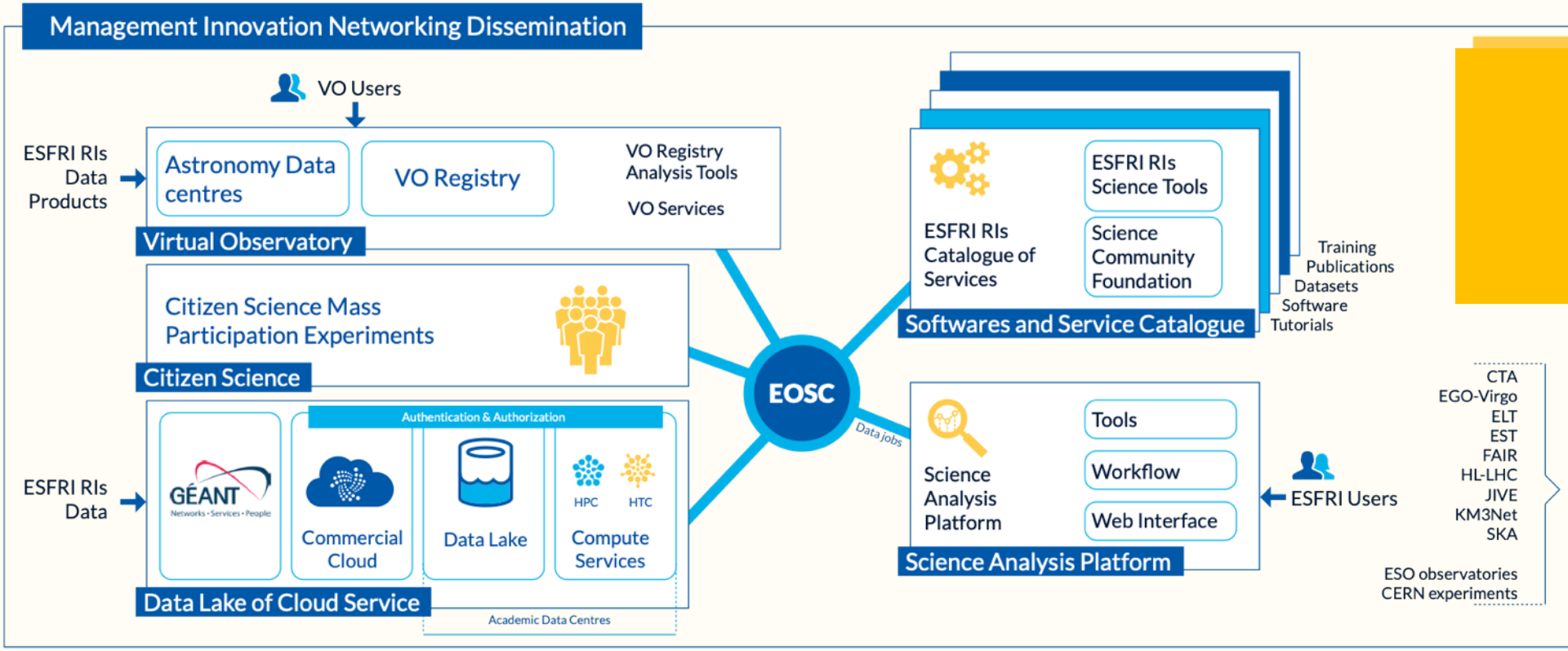
ESCAPE Project Overview - https://projectescape.eu



- Cross-fertilisation, finding and exploiting common practises
- Creating open-science community services
  (partly: to be self-hosted)
- Cross-community open science cases

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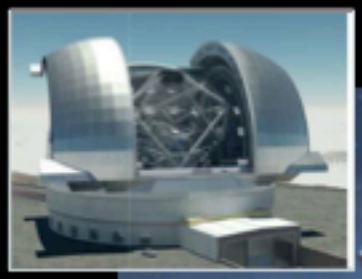
ESCAPE Partner RIs

Radio

SKA

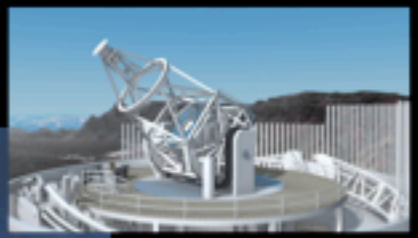
JIVE-VLBI

Visible light



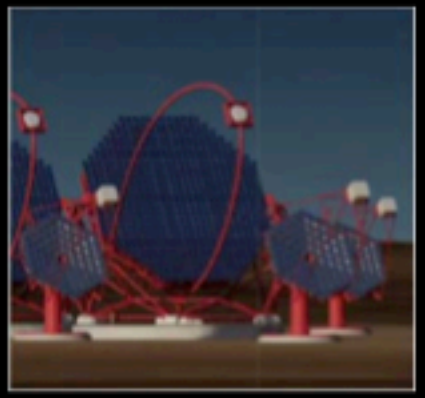
ELT

ESO



EST

Gamma rays



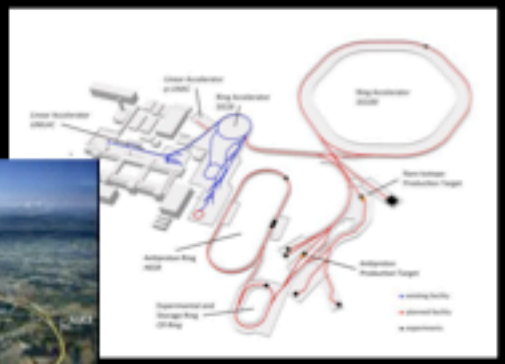
CTA

Accelerator-based Particle Physics

HL-LHC

CERN

Accelerator-based Nuclear Physics

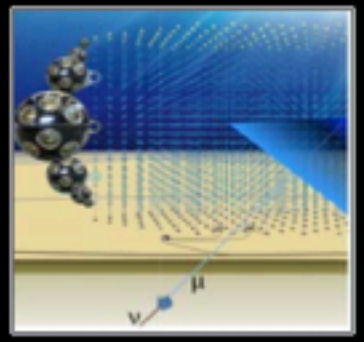


FAIR

Gravitational Waves

EGO-VIRGO

Cosmic-rays Neutrinos



KM3NeT

ESCAPE Partners

THE UNIVERSITY *of* EDINBURGH

UNIVERSITÄT HEIDELBERG
ZUKUNFT SEIT 1386

Heidelberg Institute for
Theoretical Studies

CSIC
Spanish Council of Research

The Open University

Royal Observatory
of Belgium

Community Foundation

- ESCAPE main focus on partner (ESF)RIs –
  however, it serves the full astro/particle physics community:
  - wide range of experiments included (though no full coverage)
  - community integration foreseen via test science cases, open workshops and trainings (appropriate communication channels will be installed)
  - Inclusiveness for all services of the science community
  - it will help defining (and developing) the access points to the central EOSC services

⇒ ESCAPE as leverage point from A/PP community to EOSC

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E-OSSR Aims and Objectives

- Aim: expose the software tools of the ESCAPE (ESF)RI projects in a repository under the EOSC catalogue of services
- Objectives:
  - continuous development, deployment, exposure and preservation of software/tools/services
  - interoperability, software re-use and cross-fertilisation
  - open innovation environment for open standards (workflows), common regulation and shared (novel) software for multi-messenger&multi-probe data
- All objectives follow:
  - a community-based approach
  - the FAIR principles for open software/services and data
- E-OSSR strives to:
  - Establish a foundation to (co-)develop EOSC-ready software and services;
  - expose them to users via the EOSC catalogue of services;

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WOSSL – Core Questions

- What is the role of software in a FAIR open science world?
- What are the user and provider requirements for a FAIR software repository?
  - user requirements?
  - provider requirements?
  - interaction requirements?
  - EOSC requirements?
- What concepts of a software lifecycle management are employed, which guidelines should be followed?
  - general strategies
  - development
  - testing and deployment
  - maintenance
- How should software copyrights and licenses managed, which concepts are employed, how to pick one for the own project?
- How to integrate larger communities in the software development framework and workflow?

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WOSSL – Organisation

- Date: 23rd, 24th, 27th and 28th of July, mornings (CEST)
  between (8.00) 9.00 and 12.30h,
  and a break-out session on 27th, 13.00 – 14.30h.
- Communication, see Indico sub-page
  - Main room
  - Sessions will be recorded and made public (if you consent to it)
- Instruction to Presenters:
  - upload your presentation beforehand
  - share your screen for presenting
- Support: Jutta Schnabel, Kay Graf

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WOSSL – Discussion

- For efficient discussions, different communication services have been set up – please use them to add and edit!
- To keep track of lessons learned and discuss open topics, use the WOSSL Gitlab project (EduGain login to contribute)
  - Discuss and raise questions: **Issues** (can be sorted with tags)
  - Contribute your knowledge or add interesting links in the **Wiki**
  - Browse through the talks or *view videos* (afterwards...)
- Use the ESCAPE chat channel #wossl for random talk or notifying people.
- Feel free to discuss/meet in smaller (or bigger) groups e.g. in the additional zoom rooms:
  - discussion room 1
  - discussion room 2

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