ESCAPE

European Science Cluster of Astronomy & Particle physics ESFRI research Infrastructures

Hands-on Open Science training for early career astronomy researchers

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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.

- A long tradition of Euro-VO schools:

EuroVO-AIDA (2008-2010), EuroVO-ICE (2010-2012), CoSADIE (2012-2015), ASTERICS (2015-2019), 1st ESCAPE-VO On-line School (2021), 2nd ESCAPE-VO On-line School (2021)

Goals

Participants learn how to efficiently use VO tools and services for their research

Participants share their requirements and feedback, so that we can improve tools and training

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Science with interoperable data

- Introducing the participants to the vision of ESCAPE and EOSC
- Presentation of VO tools and services
- Hands-on exercises on *real life* scientific applications
- One week of asynchronous work on participants' projects
- One/two tutors assigned to each student based on the proposed science project and dataset
- Presentations from participants
- Feedback survey
- All material available online

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Science with interoperable data: Tutorials

https://indico.in2p3.fr/event/25225/

Introduction to ESCAPE and the VO
CDS intro tutorial (CDS Portal, SIMBAD, Aladin, VizieR, X-match)
Transient events exploration (Topcat, VOSA, SVO DiscTool, SPLAT-VO)
Gaia data in Topcat & Stilts
Exploring large catalogues with HiPS & MOCs (Jupyter notebook)
Accessing and cross matching of big data sets with ADQL
Electromagnetic follow-up of gravitational-wave events (Aladin, MOCs)

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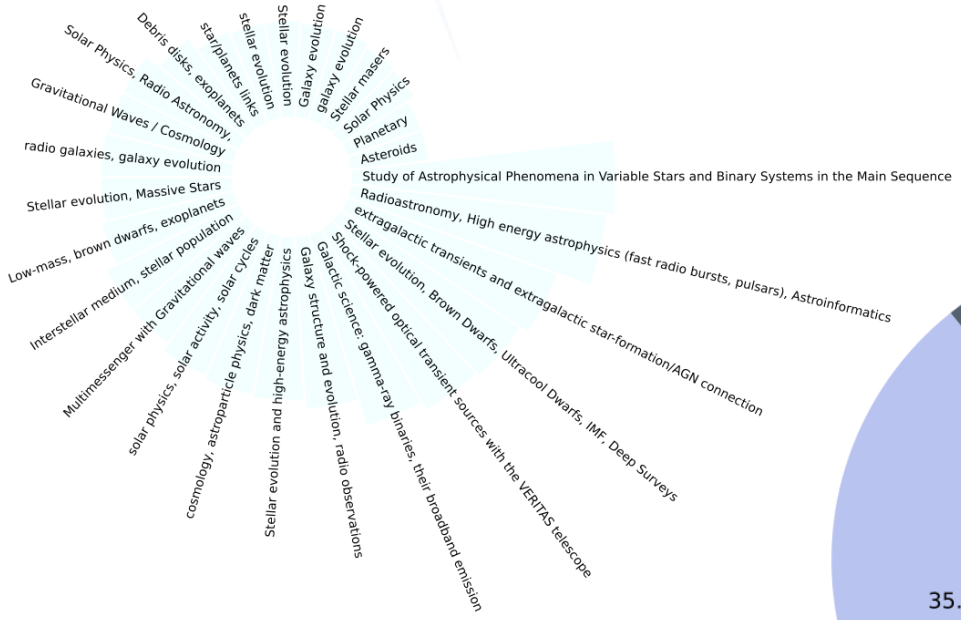
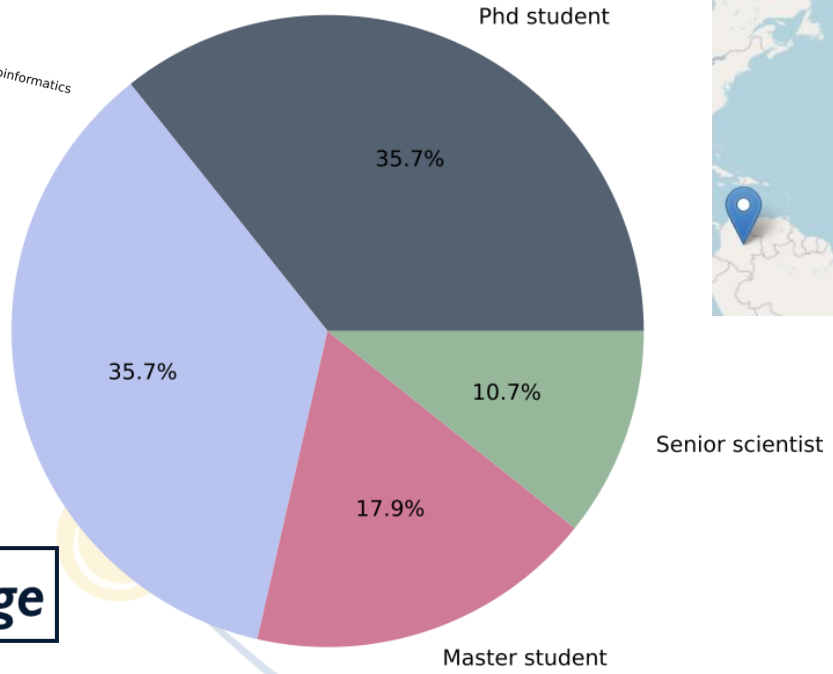
Participants

Research fields



Country

Career stage



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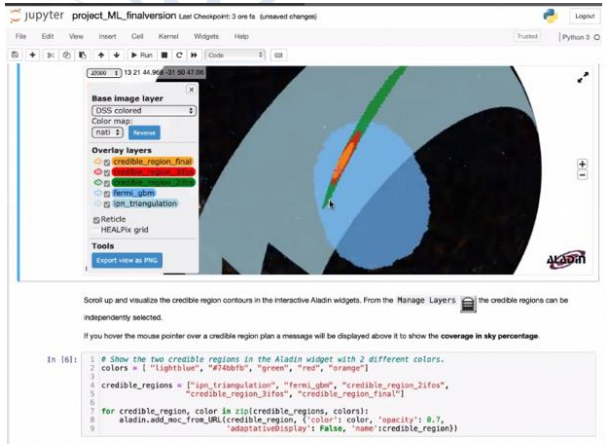
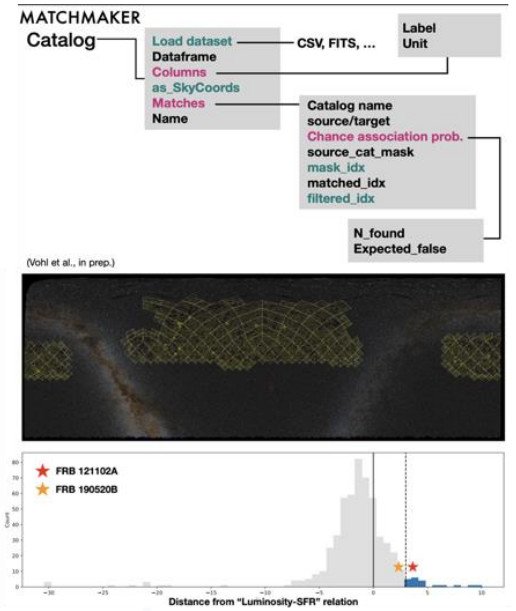
Participants' projects

Using VO tools and citizen science to search for X-ray treasures
Searching for runaway massive stars using VO tools
Multi-messenger astronomy in the context of the VO framework
High-energy data exploration with the VO
Transient alerts with the VERITAS telescope
Towards Kazakhstan Virtual Observatory using data archive of the Fesenkov Astrophysical Institute
VO, FRBs & PWNs at low frequencies
All-sky brown dwarf search



Project by ML Brozzetti



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Project by D. Vohl

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1st ESCAPE-VO School, Feb. 2021

2nd ESCAPE-VO School, Feb. 2022

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