



ESCAPE

European Science Cluster of Astronomy &
Particle physics ESFRI research Infrastructures

projectescape.eu



ESCAPE

VO | Virtual
Observatory

2nd ESCAPE-VO School

Science with interoperable data

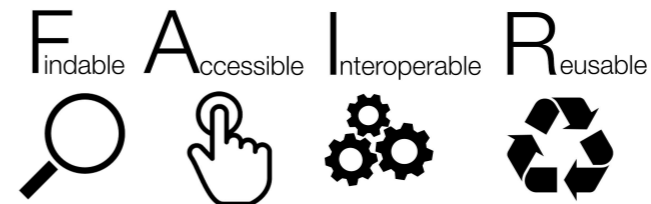
Virtual, 22-24 February - 04 March 2022



Connecting ESFRI projects to EOSC through the VO framework

- * ESFRI – European Strategy Forum on Research Infrastructures
- * EOSC – European Open Science Cloud
- * VO – astronomy Virtual Observatory framework

Aim: make astronomy data and services



to support Open Science

Key aspect: support of science community → training schools

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)



Goals of the School

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

*including representatives of ESFRI projects involved in ESCAPE

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

Organisation

6 tutorials in 3 days - online on zoom



1 week asynchronous work on participants' projects



1 day presentations from participants



Program

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)

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



Tutors

Various roles:

Tutorial design and presentation

Scientific & technical discussion

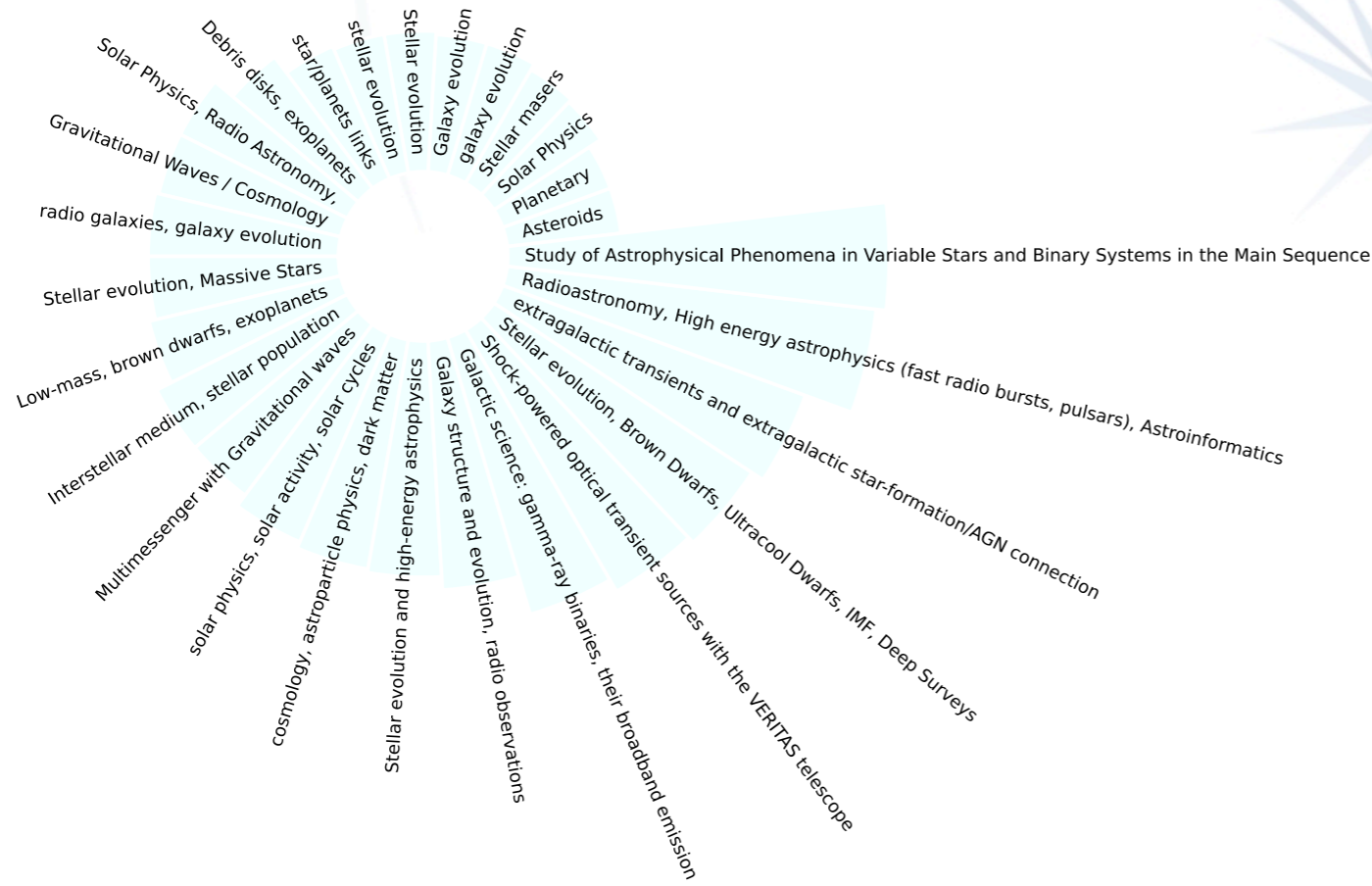
Back-up support on zoom

One-to-one meetings and mentoring for participants' projects

Mark Allen	Centre de Données astronomiques de Strasbourg
Stefania Amodeo	Centre de Données astronomiques de Strasbourg
Sara Bertocco	Istituto Nazionale di Astrofisica - Trieste
Miriam Cortés Contreras	Spanish Virtual Observatory
Patricia Cruz	Spanish Virtual Observatory
Markus Demleitner	German Astrophysical Virtual Observatory
Sébastien Derriere	Centre de Données astronomiques de Strasbourg
Giuseppe Greco	Istituto Nazionale di Fisica Nucleare - Perugia
Hendrik Heini	Centre de Données astronomiques de Strasbourg
Fran Jimenez-Esteban	Spanish Virtual Observatory
Belén López	Spanish Virtual Observatory
Marco Molinaro	Istituto Nazionale di Astrofisica - Trieste
Ada Nebot	Centre de Données astronomiques de Strasbourg
Ricardo Rizzo	Spanish Virtual Observatory
Enrique Solano	Spanish Virtual Observatory
Mark Taylor	Bristol University

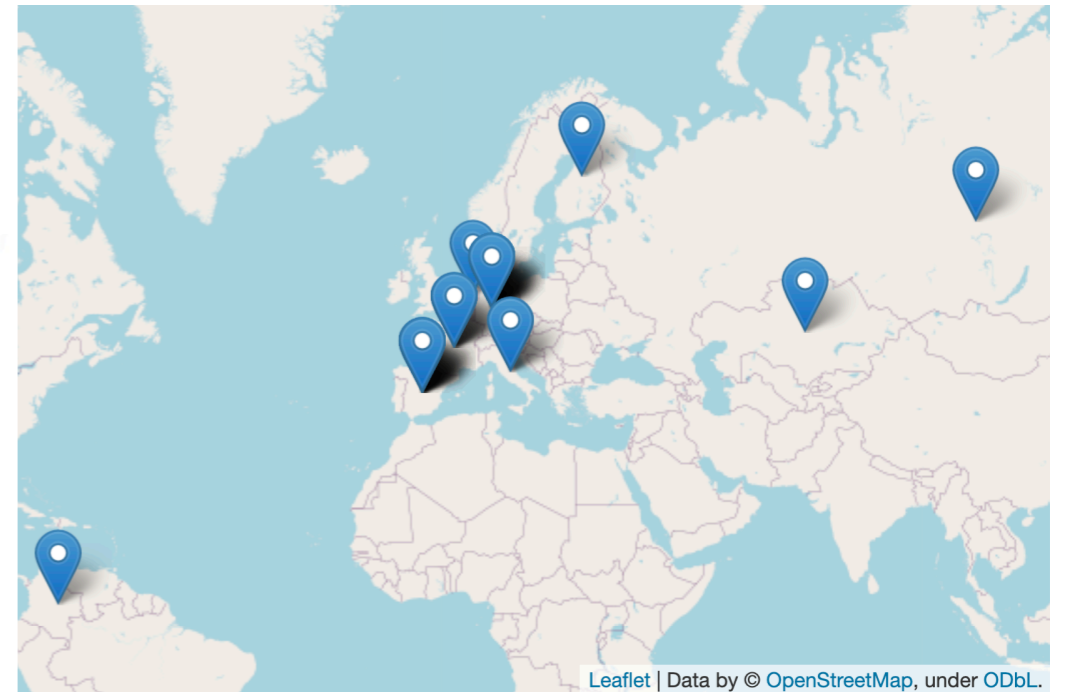


Research fields

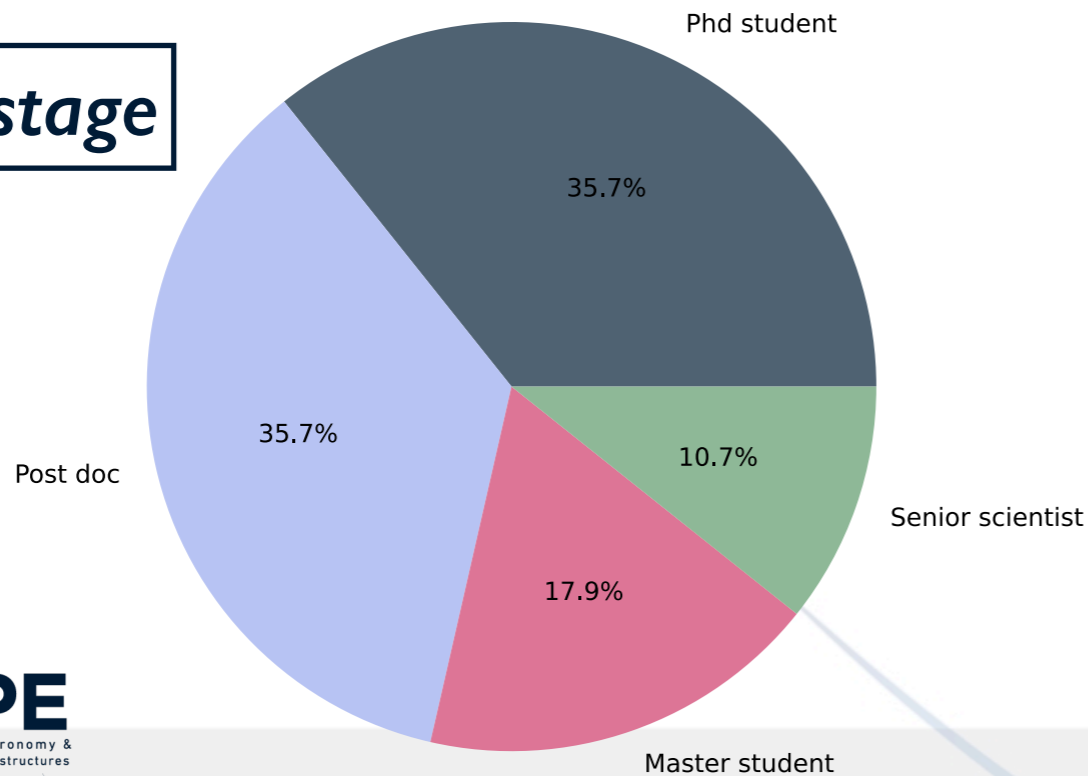


30 Participants

Country



Career stage



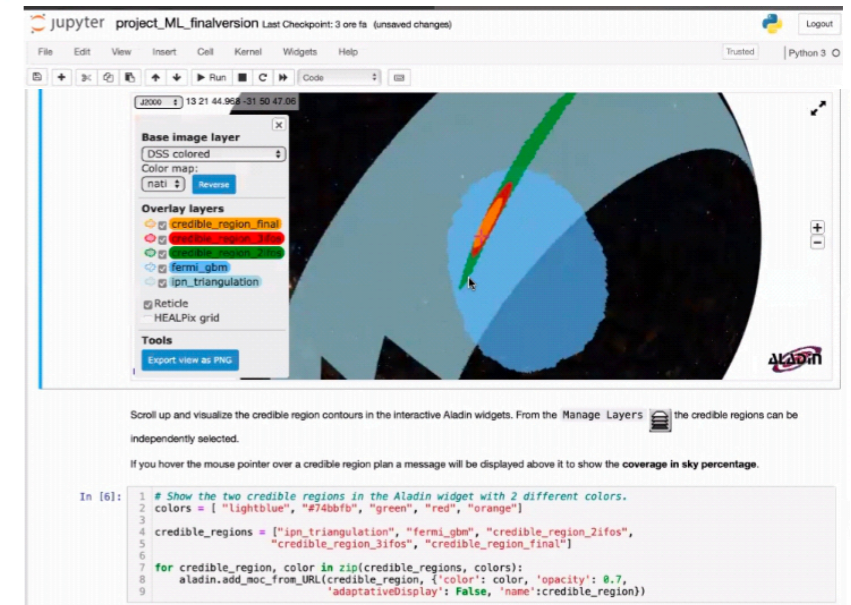
Participants' projects

Using VO tools and citizen science to search for X-ray treasures

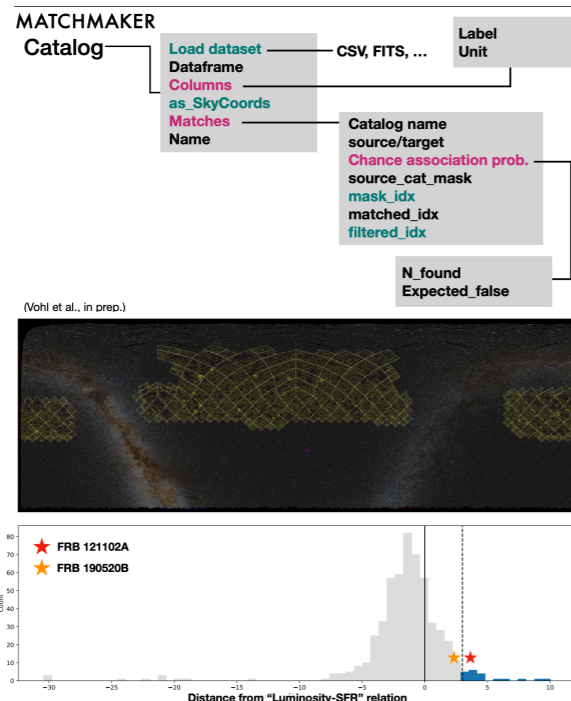
Searching for runaway massive stars using VO tools

Multi-messenger astronomy in the context of the VO framework

High-energy data exploration with the VO



Project by ML Brozzetti



Project by D. Vohl

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

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



Feedback

Have you used VO tools and services before the school?

Answered: 22

A. Yes: 16 (72.73%)

B. No: 6 (27.27%)



How would you rate the school overall

Answered: 22

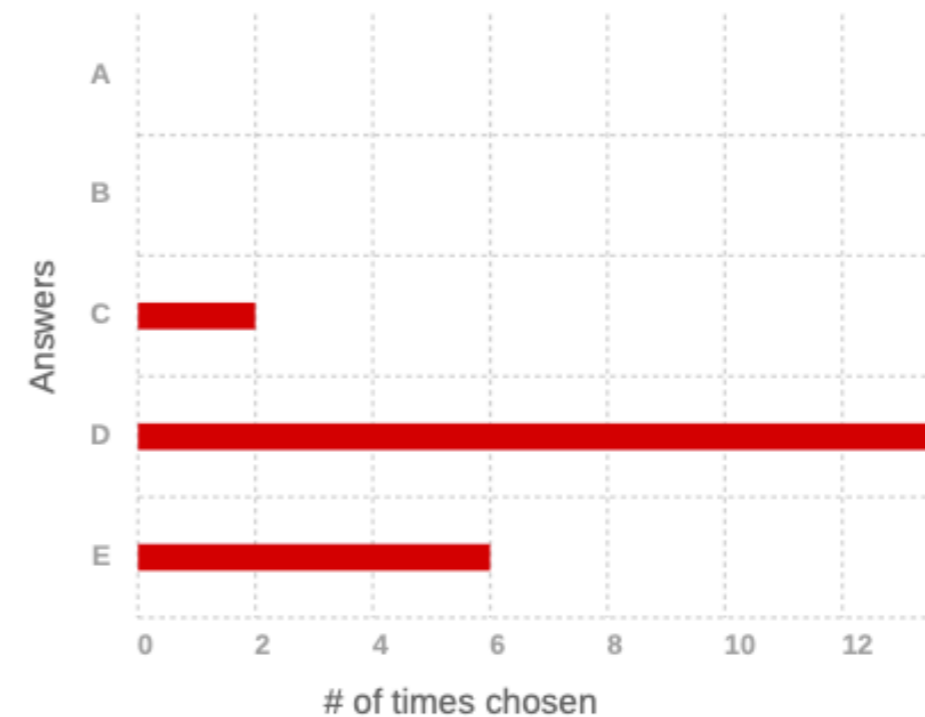
A. Poor: 0 (0.00%)

B. Satisfactory: 0 (0.00%)

C. Good: 2 (9.09%)

D. Very good: 14 (63.64%)

E. Excellent: 6 (27.27%)



Feedback

For each tutorial: level of difficulty, usefulness, time allocated, open comments

Excerpt of general comments:

A hint what is applicable for use within our solar system would have been nice.

In some tutorials there wasn't enough "do it yourself" time between the steps to keep up with the tutor because I haven't worked with some of the platforms before. But in overall it was very interesting.

I have some trouble to organise all the windows on my pc to follow the tutor and run on my pc, maybe in presence this problem do not appear

I was amazed to learn so much things hands-on! Having tutors for our projects is also very nice.

I think the school is very well organized. Tutorials have been clear, illustrative and helpful. Thanks a lot!



