

The logo graphic for ESCAPE features a stylized blue starburst at the top, a yellow circle at the bottom, and two thin blue curved lines that sweep from the starburst down to the yellow circle, resembling orbital paths.

# ESCAPE

European Science Cluster of Astronomy &  
Particle physics ESFRI research Infrastructures

## WP4 Technology forum #1

Joint WP4/WP5 session at the WP4 technology forum

4<sup>th</sup> Feb 2020 Strasbourg



# WP4 technology forum #1

- Joint sessions with WP4 and WP5
- Lots of things to learn from each other
  - Learning about the different domains
  - Identifying the common areas
  - Discovering what we don't know
- How do we want to use the platform ?
  - Learning about the different domains
  - Identifying the common areas
  - Discovering what we don't know

What can we do here that we can't do on our laptops ?



# WP4 technology forum #1

- Different use cases within astronomy
  - Client/server service model
    - Service discovery
    - Query service to select data
    - Download a subset
    - Display and manipulate locally
  - Experiment based
    - Data discovery based on experiment
    - Download the full dataset
    - Process the data locally

How do these map to the ESCAPE portal ?



# WP4 technology forum #1

- How do VO services fit in the WP5 portal ?
  - Portal (UI) based data access
    - Data discovery in the portal UI
    - Query builder in the portal UI
    - Transfer subset to staging
    - Data analysis in the notebook
  - Code (notebook) based data access
    - Data discovery, query builder and data transfer in the notebook
    - Data analysis in the notebook



# WP4 technology forum #1

## How do we publish VO data in ESCAPE ?

- Data stored on external hardware
- Service deployed on external hardware
- Query services to select subset
- Import results into ESCAPE

Deployment model used in the IVOA

Works well for client/server access

Systematic metadata and data discovery

Access to a wide range of international data publishers

Works well for interactive data discovery

Limited access to 'all' the data for bulk processing





# WP4 technology forum #1

How do we publish ESCAPE data in the VO ?

- Data stored in ESCAPE data lake
- Services deployed on ESCAPE cloud ?
- Data transfer within ESCAPE

Works well for experiment based access

Direct access to 'all' the data for bulk processing

Works well for batch processing model

IVOA standards for data description and data access ?

Overlaps with science platform activity in the IVOA

Users have access to multiple platforms

Using the same vocabulary helps understanding



# WP4 technology forum #1

## Meeting summary

- Learning a lot about our respective domains
- Learning what we need to explain to each other
- Learning what we need from each other

Work in progress to explain, explore and understand

Thank you to all who contributed to the meeting

