



ESCAPE

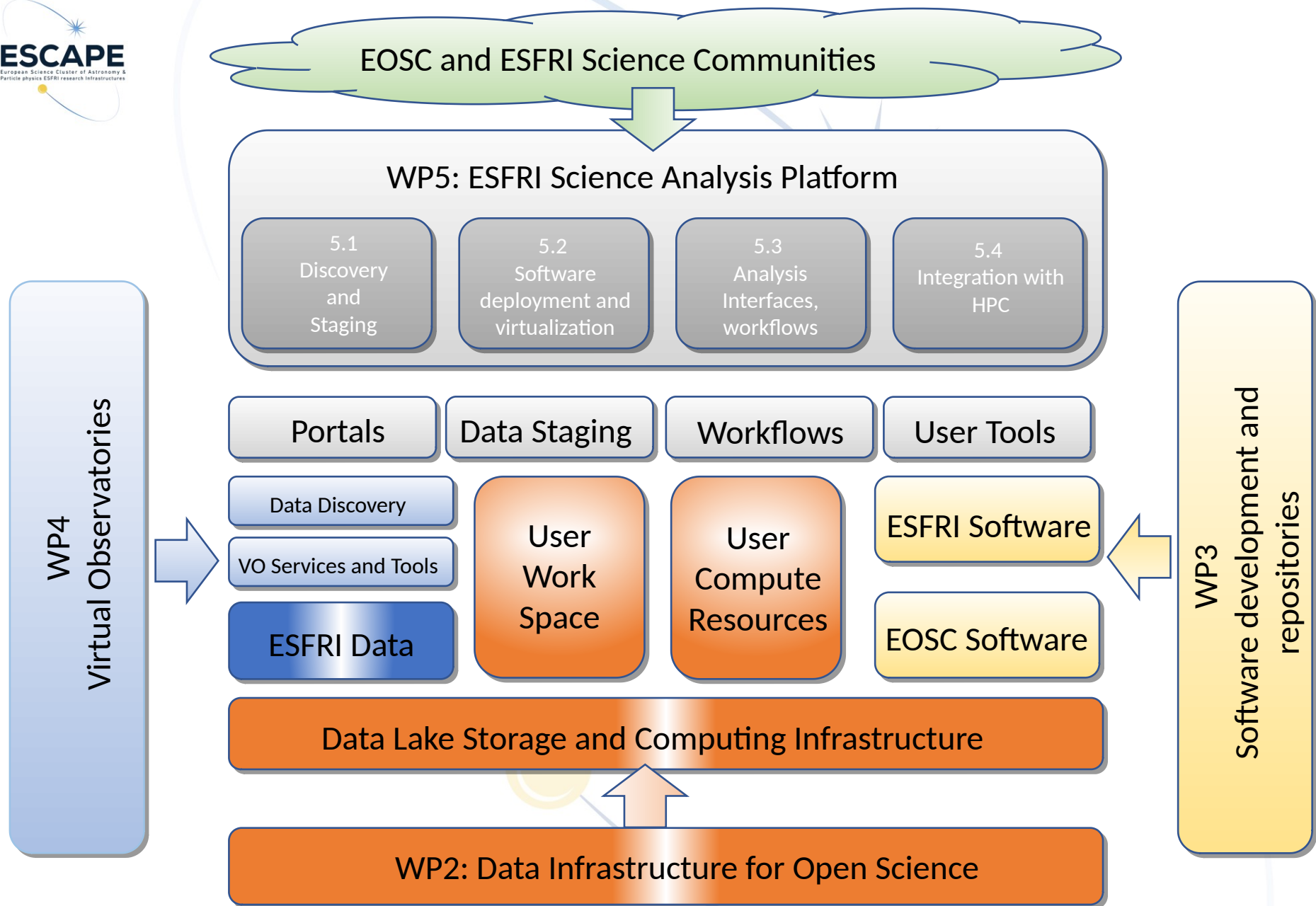
European Science Cluster of Astronomy &
Particle physics ESFRI research Infrastructures

WP2/WP5 Interface

Zheng Meyer-Zhao

WP2/WP5 F2F meeting, 1-3 July 2019, Amsterdam



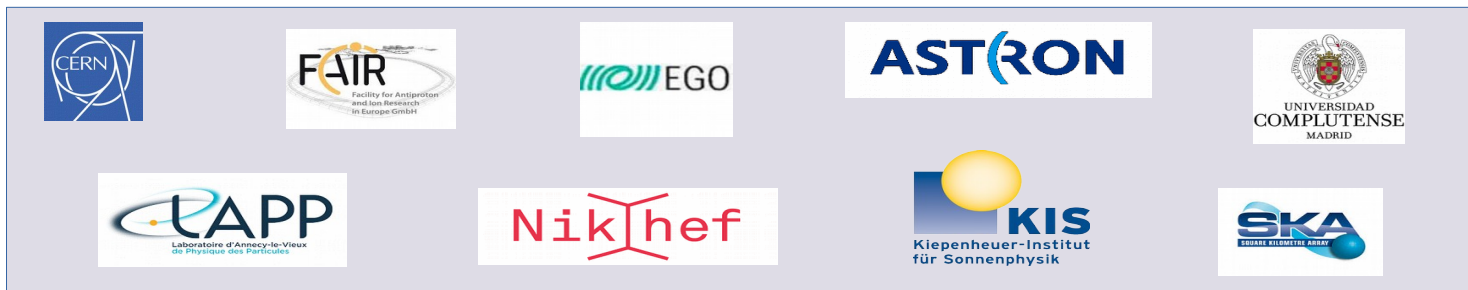


Slide from: Patrick Fuhrmann (DESY)



T5.1 - Data aggregation and staging

- Stage data in the Data Lake (WP2)
- Data discovery, VO (WP4) - to be expanded
- Dynamically allocate user workspace across distributed infrastructure
- Tools to estimate availability & latency
- Demonstrate for a range of data collections (CTA, ESO, EST, FAIR, JIVE, LOFAR,...)c



T5.2 - Software deployment and virtualisation

- Integrate software and service repository (WP3), allow access to software components developed by ESFRIs
- Provide access to software repository metadata
- Support containerisation of additional tools
- Demonstrate with variety of examples (ESO, FAIR, JIVE, LOFAR)



ASTRON



T5.3 – Analysis interface, work flows and reproducibility

- Interactive analysis interface which Integrates data access & staging (T5.1)
- Provides access to EOSC software repository (T5.2)
- Simplify porting workflows to science platform environment
 - support common deployment language (e.g. CWL)
 - deploy across EOSC infrastructure
 - promote preservation & sharing of workflows
- Start with small number of representative workflows
- Evaluate performance, monitor compliance w/ FAIR principles



T5.4 - Integration with HPC and HTC infrastructures

- Deploy user-initiated workflows on HPC and HTC infrastructure
- but... maintain interactivity and responsiveness
- Obviously close links with WP2 – integrate Science Platform with Data Lake
- Expand number of ESFRIs supported

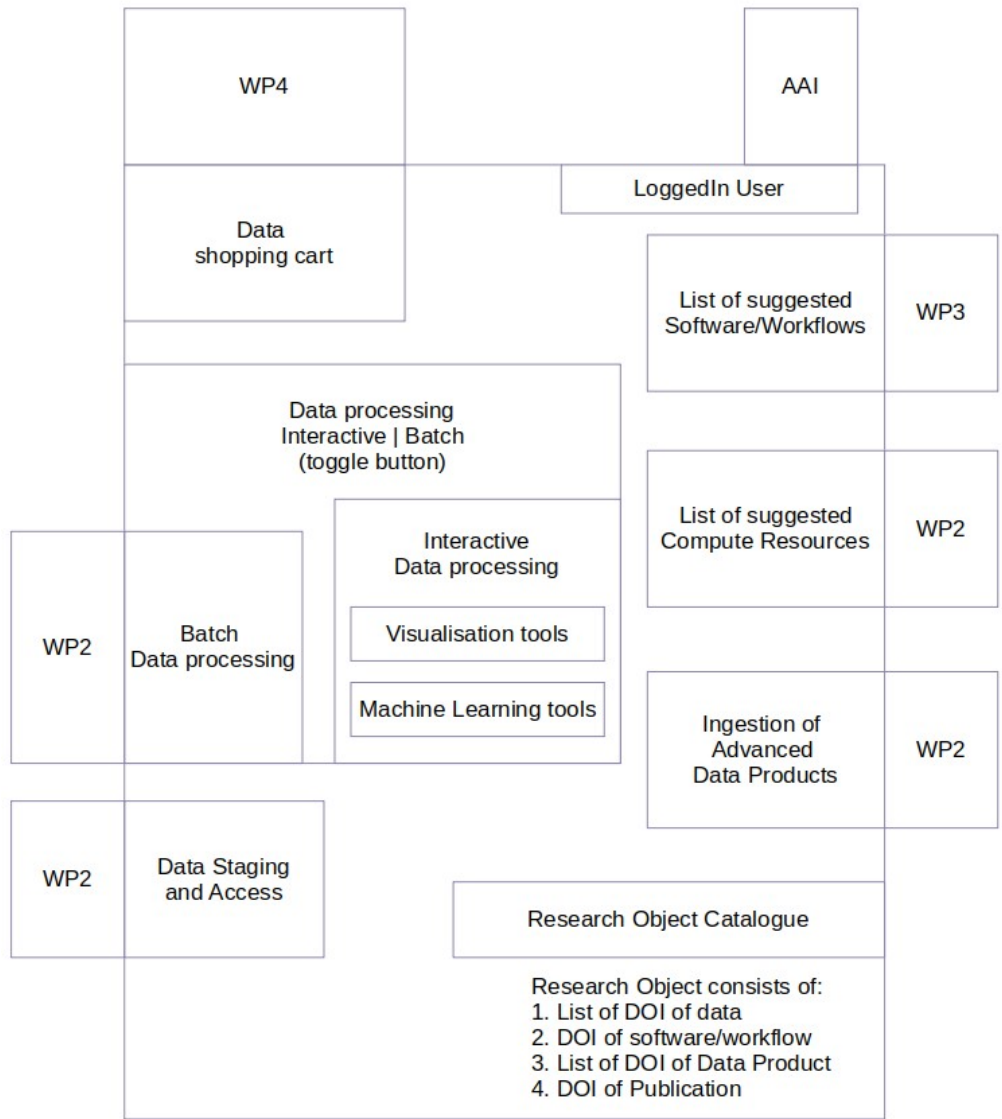


ASTRON

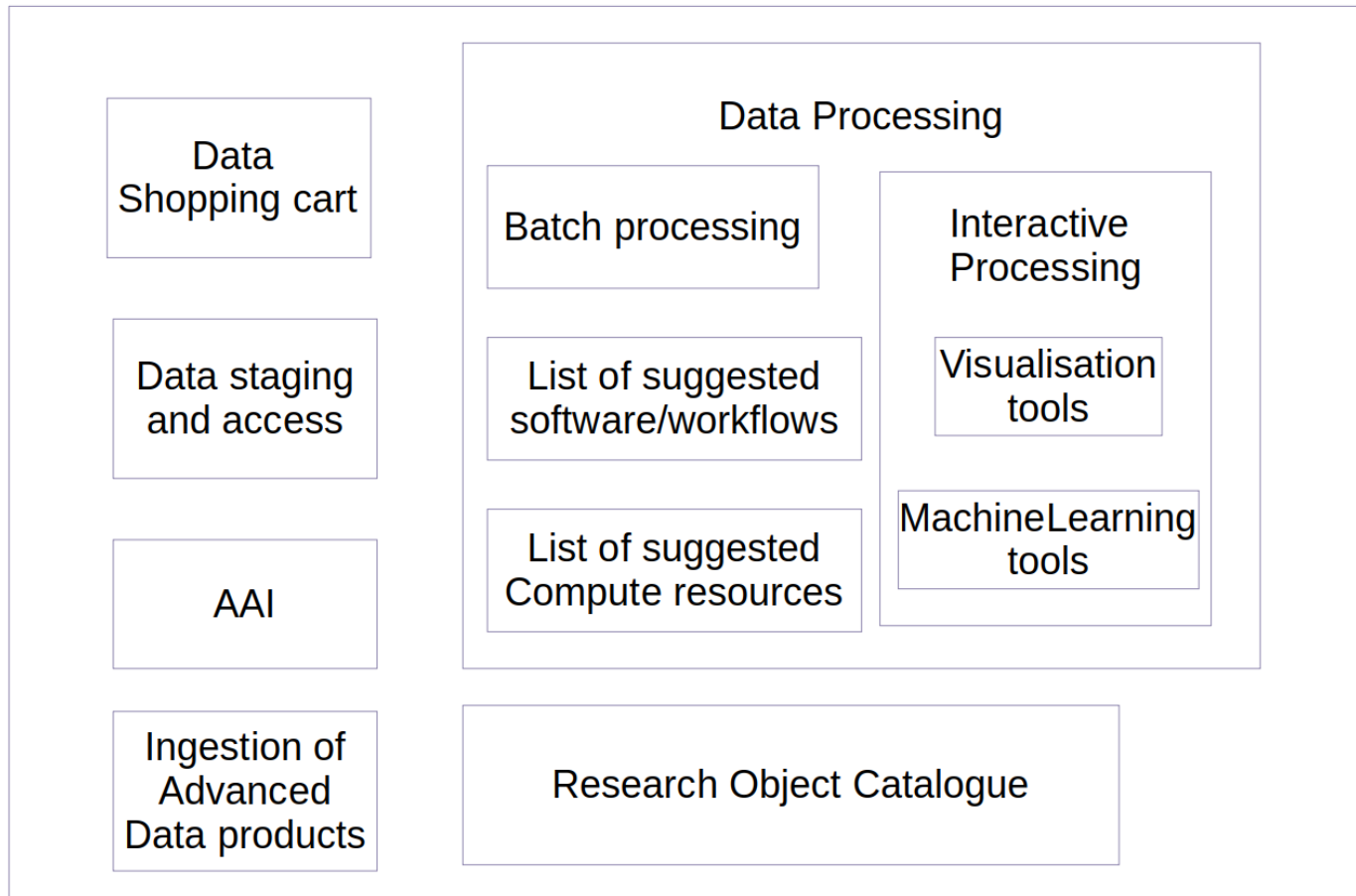
Nikhef



ESAP UI components



Identified ESAP Services



WP2/WP5 interface

- Data Staging and access
 - Ingestion of advanced data products
 - Batch processing
 - List of suggested compute resources
 - AAI
-
- Are there any other interfaces between WP2 and WP5 than the ones identified above?
 - What scenarios does WP5 expect to cover w.r.t. the interface between WP5 and the caching/staging layer of WP2? Examples
 - User has specific preference about where data is to be processed (e.g. agreements with specific compute centres)
 - User just wants to process near the data, provided available capacity
 - User has specific processing needs which make specification of location needed
 - User has specific QOS requirements (e.g. prefer to wait longer to have the full data set available on fast storage than to wait shorter but have slower reads during processing)



The logo features a blue arc at the top left that curves towards a blue starburst. A yellow circle is positioned above a blue arc at the bottom right.

ESCAPE

European Science Cluster of Astronomy &
Particle physics ESFRI research Infrastructures

Thank you !