



Astronomy ESFRI & Research Infrastructure Cluster
ASTERICS - 653477



ASTERICS WP4 – DADI Data Access, Discovery and Interoperability

Françoise Genova and the WP4 team

ASTERICS

- Astronomy ESFRI Research Infrastructure Cluster
- Horizon2020 project submitted in September 2014 –
Topic : Implementation of cross-cutting solutions for clusters of ESFRI research infrastructures
- Focus: SKA, CTA, KM3Net, close links with E-ELT and EGO
- 22 partners, 15 M€, including 4.5 for WP4, 4 years, began 1 May 2015
- Major collaboration
Astronomy/Astrophysics/Astroparticle physics
- Multi-wavelength/multi-messenger

Five Work Packages

- WP1 – management (ASTRON)
- WP2 – Dissemination, Engagement and Citizen Science (DECS, S. Serjeant, OU)
- WP3 – Observatory e-Environment linked by common challenges (OBELICS, G. Lamanna, CNRS-LAPP)
- WP4 – Data Access, Discovery and Interoperability (DADI, F. Genova, CNRS-OAS)
- WP5 – Connecting Locations of ESFRI Observatories and Partners in Astronomy for Timing and Real Time Alerts (CLEOPATRA, A. Szomoru, JIV-ERIC)

WP4 high level objectives

Make the ESFRI and pathfinder project data available for discovery and usage by the whole astronomical community, interoperable in a homogeneous international framework, and accessible with a set of common tools.

European VO teams **AND** ESFRI/pathfinder teams are involved in **ALL** activities.

- DADI (WP4) - Francoise Genova (CNRS-OAS):



ASTERICS WP4: DADI (Data Access, Discovery and Interoperability)

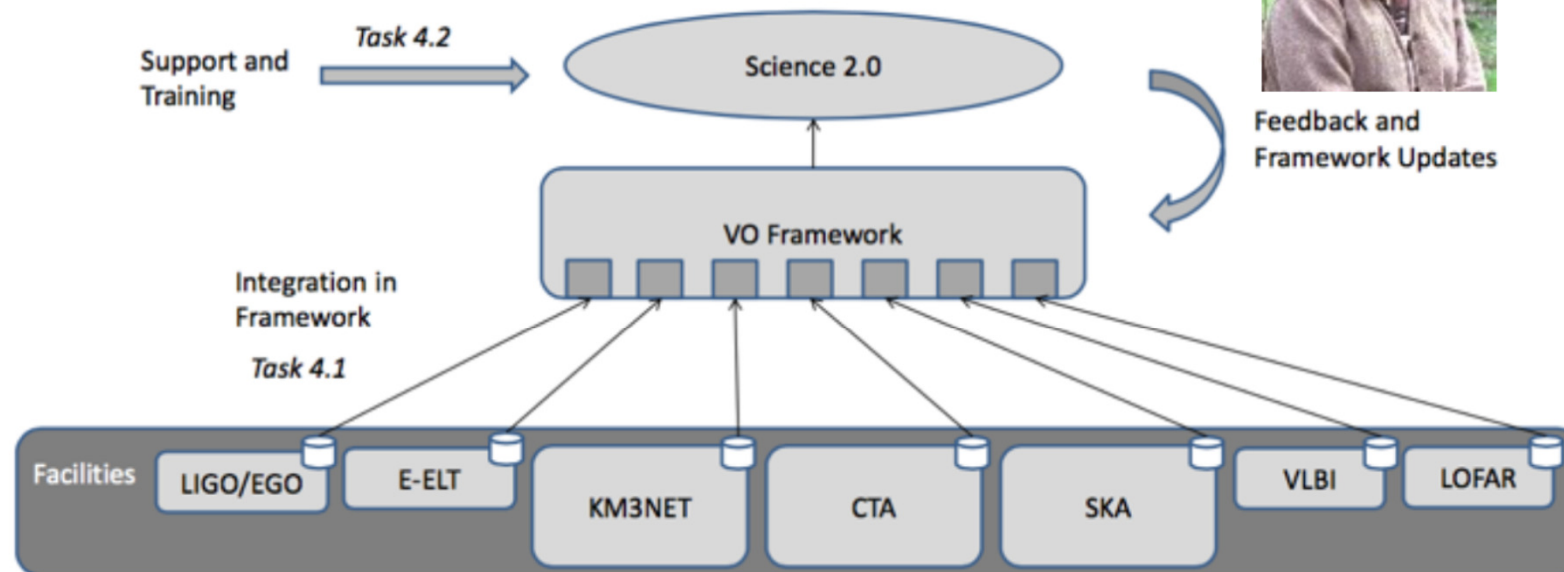


Figure 6: The ESFRI projects integrated in the VO Framework offers users uniform access.

Who's involved

- Euro-VO partners, i.e. VO initiatives from France (CNRS/OAS- CDS+UNISTRA), Germany (UHEI), Italy (INAF), Spain (INTA), UK (UEDIN)
- Representatives of ESFRI and pathfinders
 - CTA (CNRS/LUTH + OBSPAR)
 - EGO/VIRGO and ET (CNRS/APC)
 - KM3Net (CNRS/CPPM)
 - SKA (ASTRON)
- ESO is associated to the project
- ESA (ESAC) is working in close collaboration with Euro-VO

Targets

Three Tasks in support to three complementary targets

- Task 4.1: Support to astronomy ESFRI facilities, their pathfinders and other infrastructures of pan-European interest for implementation of their data in the VO framework (INAF/UHEI)
- Task 4.2: Support to the astronomical community (CNRS-CDS/INTA)
- Task 4.3: Updates of the VO framework from feedback and requirements (CNRS-CDS/UEDIN)

Activities during the period

- DADI is structured around the organisation of Workshops (Deliverables) and participation in external events (IVOA meetings, which are Milestones, plus ADASS, RDA)
- Intense activity during the first 9 months
 - to create DADI community
 - to introduce newcomers to the VO
 - to share information on the partners' expertise, activities and needs
 - to begin to identify topics of common interest and collaboration paths
 - to perform technological work on the initial priorities, in particular multi-dimensional data (IVOA standards) – defining standards and agreeing on them takes time!

Deliverables

#	Title	Lead partner	Due date	Actual date and location
D4.1	First DADI Technology Forum	CNRS/CDS (Task 4.3)	September 2015	17-18 Sept. Strasbourg
D4.2	FIRST ASTERICs European School	INTA (Task 4.2)	November 2015	15-17 Dec. Madrid
D4.3	First ESFRI Forum & Training Event	INAF (Task 4.1)	November 2015	3-4 Dec. Trieste
D4.4	Second DADI Technology Forum	UEDIN (Task 4.3)	March 2016	7-8 March Edinburgh

Milestones and other relevant meetings

- IVOA Interoperability meetings are milestones

M2	IVOA Sesto (Italy)	14-19 June 2015
M5	IVOA Sydney (Australia)	30 October-1 November 2015
M7	IVOA Cape Town (SA)	8-13 May 2016

- Other relevant meetings
 - ADASS XXVth Meeting, Sydney, 25-29 November 2015
 - RDA Plenary Meetings, Paris, 23-25 October 2015 & Tokyo, 1-3 March 2016

D4.1 & D4.4 Technology Forums

- Preparation of the IVOA meetings and « hack-a-thon », i.e. splinter discussions of technical topics
- First Tech Forum: DADI kick-off
 - Information about ASTERICS, DADI and IVOA
 - Presentation of partners' expertise and on-going work
 - Identification of topics of interest for DADI
- Second Tech Forum
 - Technical discussions on many topics



D4.3 First ESFRI Forum & Training Event

- 3-4 December 2015
- 25 participants, all DADI partners and ESO
- Centered on the ESFRI and pathfinder requirements
- Organised around the topics identified during the Tech Forum
 - Multi-dimensional data access
 - Time domain data access (<> WP5)
 - VO registry of resources
 - Authentication & Autorisation (WP3)
- VO standards and tools already in use
- Discussion on specific support activities initiated with the ESFRIs and pathfinders



D4.2 First DADI School

- 15-17 December 2015
- 43 participants from France, Germany, Italy, Spain, UK, and from Belgium, Greece, Lithuania, Poland, Portugal and Slovakia, also CTA, LOFAR, ESO
- 11 tutors
- Learn enough about the VO to be able to use it in one's own research
 - Short presentation of the IVOA and ASTERICs
 - “Hands-on” tutorials & “Treasure Hunt”
 - Participants' own projects
 - Presentation of some of the projects and feedback session
- Significant preparatory work
 - Update of the tutorials
 - Discussion with the participants about their scientific interests
- Follow-up
 - Two seminars in Athens in 2016
 - The participants will be polled each year to follow the School impact and monitor their usage of the VO





IVOA

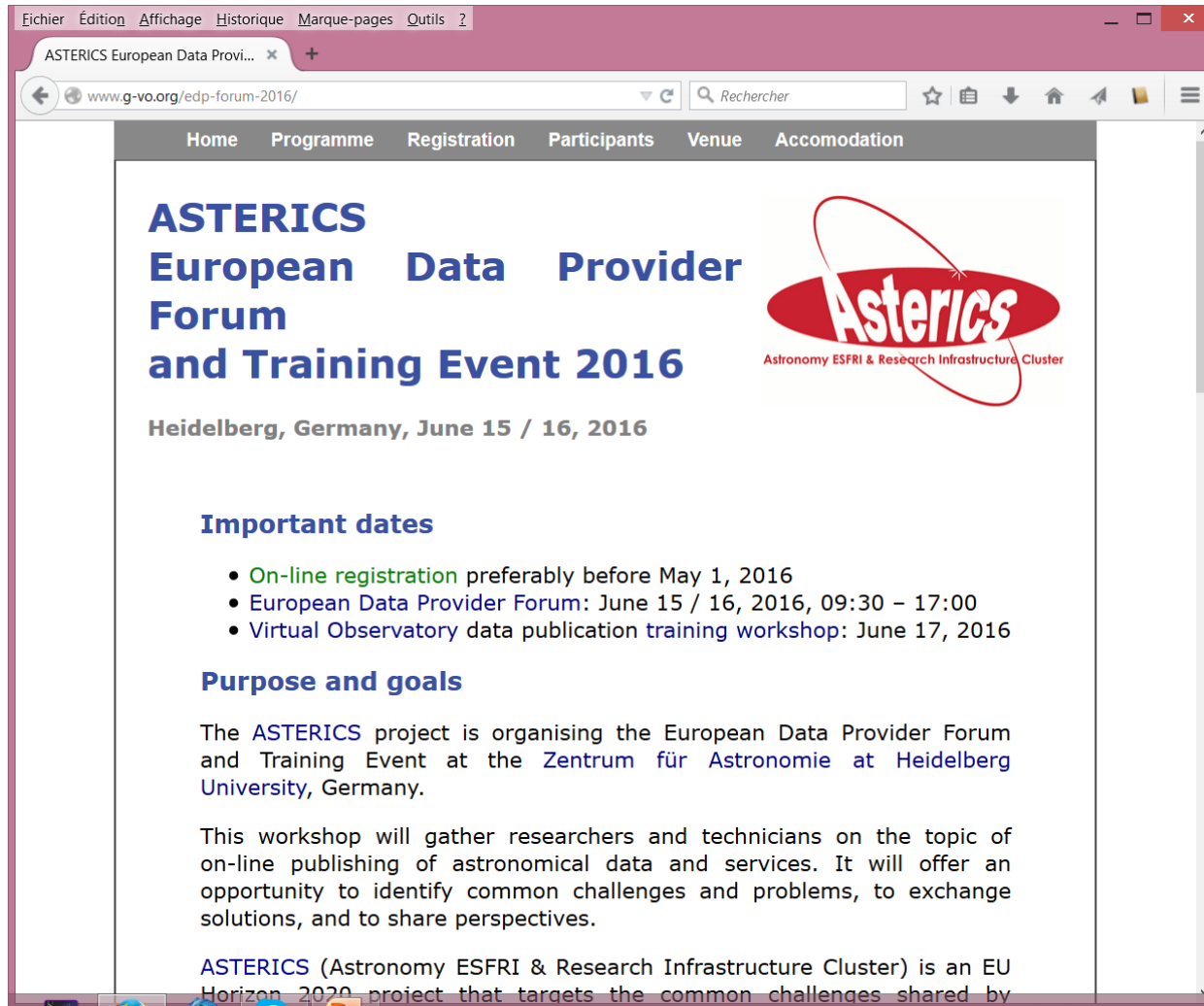
- DADI technological activities (Task 4.3) are performed in the IVOA context
- Sesto (June 2015): presentation of DADI and work on multi-d standards
- Sydney (October 2015) & Cape Town (May 2016)
 - Many meeting highlights relevant to DADI
 - Well prepared by the Tech Forums
 - Significant impact of participants linked to DADI
 - Cape Town: Focus Sessions on large projects incl. ASTERICS CTA and EGO/VIRGO/ET representatives

Among the other activities

- Technical work on Provenance (VO/CTA)
- Collaboration between CDS and EGO on Aladin customization
- Autorisation & Authentication
- Collaboration with EUDAT (i.e. with the « generic » data infrastructure)
- This meeting

Next Deliverables


#	Title	Lead partner	Due date	Actual date and location
D4.5	Second ASTERICs European School	CNRS-CDS (Task 4.2)	November 2016	15-17 Nov 2016 Strasbourg
D4.6	First European Data Provider Forum & Training Event	UHEI (Task 4.1)	November 2016	15-16 June Heidelberg



The screenshot shows a web browser window with the URL www.g-vo.org/edp-forum-2016/. The page features a navigation menu with links for Home, Programme, Registration, Participants, Venue, and Accommodation. The main content area is titled "ASTERICS European Data Provider Forum and Training Event 2016" and includes the ASTERICS logo. Below the title, the location and dates are listed as "Heidelberg, Germany, June 15 / 16, 2016". A section titled "Important dates" contains a bulleted list of key events. The "Purpose and goals" section describes the workshop's focus on on-line publishing of astronomical data and services. The footer mentions that ASTERICS is an EU Horizon 2020 project.

Home Programme Registration Participants Venue Accommodation

ASTERICS European Data Provider Forum and Training Event 2016



Astronomy ESFRI & Research Infrastructure Cluster

Heidelberg, Germany, June 15 / 16, 2016

Important dates

- On-line registration preferably before May 1, 2016
- European Data Provider Forum: June 15 / 16, 2016, 09:30 – 17:00
- Virtual Observatory data publication training workshop: June 17, 2016

Purpose and goals

The ASTERICS project is organising the European Data Provider Forum and Training Event at the Zentrum für Astronomie at Heidelberg University, Germany.

This workshop will gather researchers and technicians on the topic of on-line publishing of astronomical data and services. It will offer an opportunity to identify common challenges and problems, to exchange solutions, and to share perspectives.

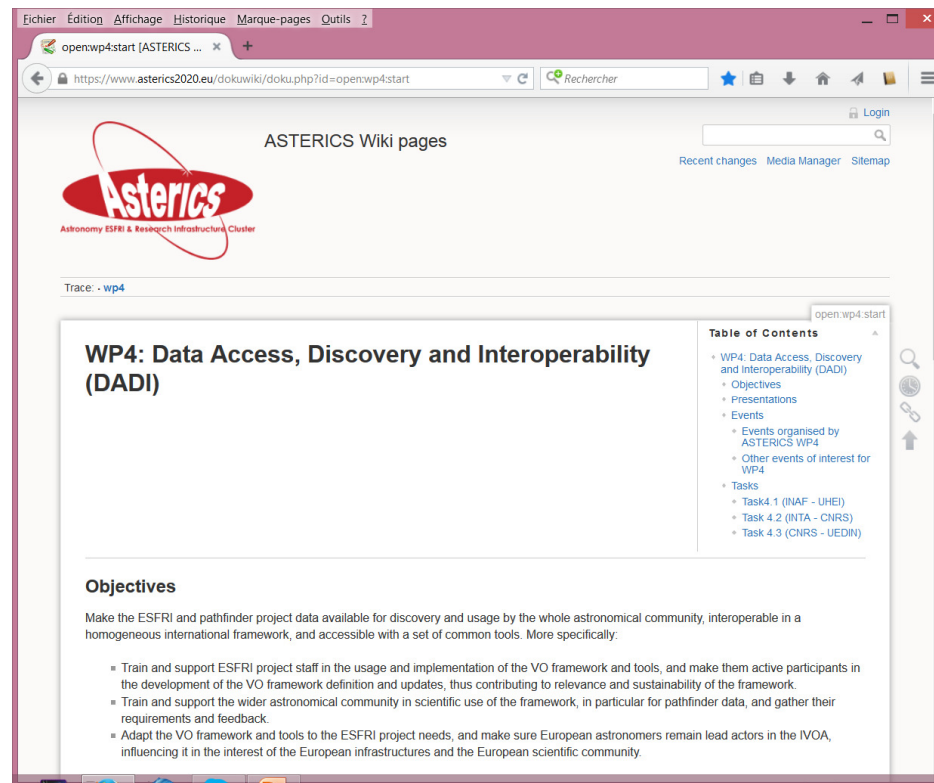
ASTERICS (Astronomy ESFRI & Research Infrastructure Cluster) is an EU Horizon 2020 project that targets the common challenges shared by

In 2017 and 2018

- One School/year Madrid then Strasbourg
- One Technology Forum /year Strasbourg then Edinburgh
- One ESFRI Forum & Training Event in Trieste in 2018
- One Data provider Forum & Training Event in Heidelberg in 2019

DADI web site

<https://www.asterics2020.eu/dokuwiki/doku.php?id=open:wp4:start>



The screenshot shows a web browser window displaying the DADI web site. The browser's address bar shows the URL <https://www.asterics2020.eu/dokuwiki/doku.php?id=open:wp4:start>. The page header includes the Astercics logo and the text "ASTERICS Wiki pages". The main content area is titled "WP4: Data Access, Discovery and Interoperability (DADI)". To the right of the main content is a "Table of Contents" sidebar with the following items: WP4: Data Access, Discovery and Interoperability (DADI), Objectives, Presentations, Events, Events organised by ASTERICS WP4, Other events of interest for WP4, Tasks, Task 4.1 (INAF - UHEI), Task 4.2 (INTA - CNRS), and Task 4.3 (CNRS - UEDIN). The "Objectives" section is visible at the bottom of the page, starting with the text: "Make the ESFRI and pathfinder project data available for discovery and usage by the whole astronomical community, interoperable in a homogeneous international framework, and accessible with a set of common tools. More specifically:" followed by a bulleted list of objectives.