



# Asterics

**Astronomy ESFRI & Research Infrastructure Cluster**



# ASTERICS: The Virtual Observatory and the ESFRI Infrastructures

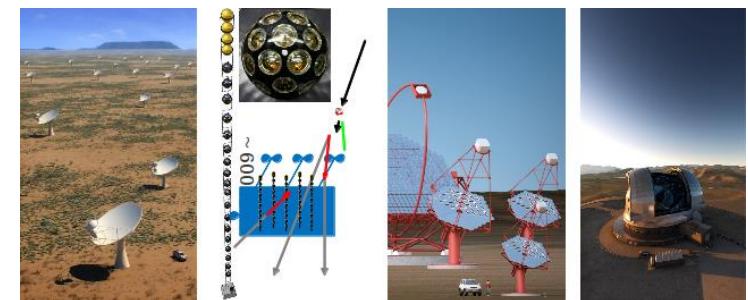
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# Basic Data (I)

- “ **Title: Astronomy ESFRI & Research Infrastructure Cluster**
- “ **Coordinator:** Michael Garrett (ASTRON)
- “ Awarded 14.991 M€ from EC (H2020-INFRADEV-1-2014-1)
- “ Duration: 48 months (T0: May 1<sup>st</sup>, 2015)
- “ **22 partners from 7 different countries**
- “ Brings together for the first time astronomy and astroparticle physics: SKA, CTA, KM3NeT, E-ELT.
- “ Goal: Establish a single collaborative cluster
  - . Identification and solution of key challenges of common interest



# (Very short) description of tasks

” **WP1 Management (ASTRON)**

” **WP2 (DECS). Leader: Stephen Serjeant (OU).**

É Web interfaces, outreach material. Citizen science.

É **WP3 (OBELICS).** Leader: **Giovanni Lamanna (CNRS-LAPP).**

É Data streaming, data integration (databases), Data Mining.

É **WP4 (DADI).** Leader: **Francoise Genova (CDS).**

É Virtual Observatory.

É **WP5 (CLEOPATRA).** Leader: **H.J. van Langevelde (JIVE).**

É Synchronization, multi-messenger methods, scheduling.

# WP4: Data access, discovery and interoperability.



- **Objectives:**

- É . Make ESFRI data VO-compliant.

- ó Easy and efficient discovery, access and analysis.

- **Tasks:**

- É Support to implementation of ESFRI data in the VO framework.

- É Support to scientific exploitation of ESFRI data using VO tools.

- É Update of VO framework from feedback and requirements.

É V.O & ESFRI teams **will work together on ALL tasks**  
**Sustainability**

# WP4: Who is 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

# Task4.1: Support to implementation

- **Activities:**

- É Annual Forum and training event.

- ó Put in the same room data providers and VO staff.
  - ó Teach on how to use the publishing tools to make ESFRI datasets VO-compliant.

- É Direct support (technical visits).

- É On-line tutorials and materials.



# Task4.2: Support to astronomical community



- **Activities:**

É Training.

- ó VO schools

- ó On-line science tutorials

É Collaboration with science projects (%O-science+).



# Task4.3: Updates of the VO framework

- **Activities:**

- Identification of priorities

- Initial priorities: multi-d, time domain.

- Update or definition of standards and tools

- ASTERICS Technology Forum

- Participation in IVOA WG\$ and IG\$.

- Liaison with Research Data Alliance and other initiatives dealing with interoperability.

# More on ASTERICS?

## Special Meeting 7 ASTRONET 2015 - 2025: The Next Decade

Wednesday, June 24th			
Time	Paper		
1115 - 1130	1617	<b>Ronald Stark</b> <a href="#">Taking the Vision from one Decade into the Next</a>	
1130 - 1150	200	<b>Michael Garrett</b> <a href="#">Cross-cutting Needs and Actions - Tapping into H2020 via ASTERICS</a>	
11.15	1633	<b>Jason Hessels</b> <a href="#">Radio Astronomy in Europe: Up to, and beyond, 2025</a>	
11.15 - 13.00	951	<b>Bruno Leibundgut</b> <a href="#">Future Strategy for OIR Astronomy</a>	
1230 - 1250	838	<b>Xavier Barcons</b> <a href="#">Space and ground synergy</a>	
1250 - 1300		<b>Discussion</b> Discussion on morning session	

