

### **DADI Status**

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### Deliverables since Tech Forum 2

- One deliverable/task during the period
- Deliverables are Workshops, the « text deliverable» (Del.) is provided afterwards

#	Title	Lead partner	Due date	Actual date and location
D4.6	First European Data Provider Forum & Training Event	UHEI (Task 4.1)	November 2016	Held 3-4 June Heidelberg Del. 7 Oct. 2016
D4.5	Second ASTERICS European School	CNRS (Task 4.2)	November 2016	Held 15-17 Nov Strasbourg Del. being written
D4.7	Third Technology Forum	CNRS (Task 4.3)	March 2017	TODAY and TOMORROW



#### Milestones and other relevant meetings

The IVOA Interoperability meetings are milestones

M7	IVOA Cape Town (SA)	8-13 May 2016
M11	IVOA Trieste (Italy)	21-23 October 2016

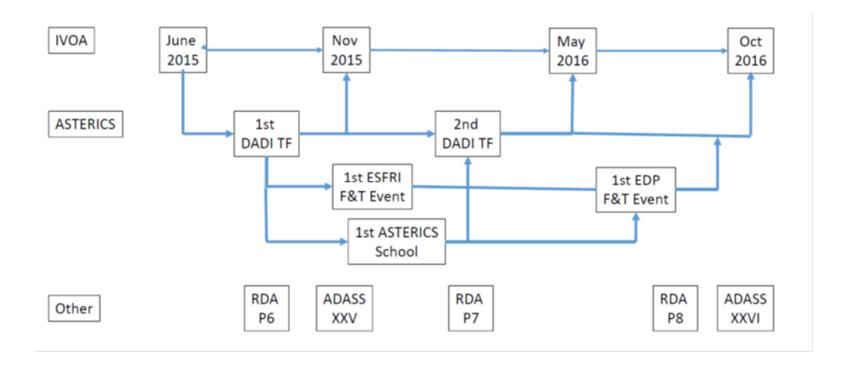
- Other relevant meetings
  - ADASS XXVI<sup>th</sup> Meeting, Trieste, 17-20 Oct. 2016
  - RDA 8th Plenaries, Denver, Sept. 2016



### **ASTERICS** Periodic Review

- Review of the first 18 months 14 March 2017
- Presentation of all the project activities
- The review went well

# DADI events in a nutshell (first18 months)



# D4.6 First European Data Provider Forum & Training Event

- 15-16 + 17 June 2016, Heidelberg
- 45 participants, all DADI partners, ESA, ESO
  & data providers not linked to ASTERICS
- On-line publishing of astronomical data
- Identify common challenges and perspectives, share lessons learnt and best practices
- Large and smaller data providers wide diversity in size and context
- The VO is part of the landscape
- Training on VO data publication tools
  17 June, 16 participants/8 tutors

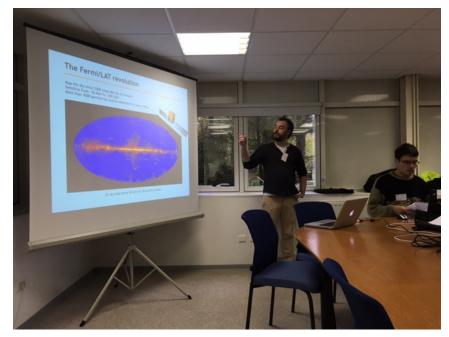


#### D4.5 Second DADI School

- 15-17 November 2016, Strasbourg
- 31 participants from France, Germany, Italy, Spain, UK, and from Bulgaria, Hungary, Ireland, Lithuania, the Netherlands, Poland, Portugal, also KM3Net, Grav. Waves, CTA, one Australian
- 20 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
- Major evolution: CTA and Grav. Waves provided input for tutorials and participated as tutors – ESFRIs become actors in the VO game

















#### IVOA

- DADI technological activities (Task 4.3) are performed in the IVOA context
- Significant participation in the meetings and WGs, including leadership of Groups and on standards
- CTA actively participating in the Provenance Data Model definition
- Focus session on projects in Cape Town, CTA and Grav. Wave talks from ASTERICS participants
- Survey of project requirements on-going



## IVOA highlights of specific interest

- WG/IG work on
  - HiPS (RFC)
  - SODA (TCG approval), DALI (RFC)
  - SSO 2.0
  - Time domain
  - Provenance
- New RECs
  - IVOA ID 2.0 (23 May 2016)
  - SimDAL 1.0, ObsCore 1.1, and VTP2.0 (20 March 2017)
  - Several to come



#### ADASS XXVIth

- The place to be to discuss with large projects about their data
- Excellent visibility of ASTERICS
  - ASTERICS booth
  - Grav. Wave, Data Models and HPC keynotes
  - Several talks on DADI topics
  - CLEOPATRA presentation by A. Szomoru
  - Posters



## Specific meetings & activities

- DADI-Gravitational Wave community meeting, Strasbourg, 31 May-1 June 2016
- DADI-LOFAR meeting, Strasbourg, 18 Nov. 2016 publication of visibility data in the VO
- 4 «Provenance Days», which are leading the preparation of the IVOA Provenance Data Model
- Cross-WP discussion of A&A (WP3) and time domain (WP5)
- DADI-CLEOPATRA Time Domain meeting, 21 March 2017



## Examples of impact

- The IVOA « caravan » of standards for multi-D data is nearly completed
- Collaboration between CDS and EGO on Aladin customization for the GWSky gravitational wave follow-up tool
- Publication of ANTARES data in the VO by GAVO
- CTA will use the IVOA Provenance Data Model in its pipeline

#### GW alerts and skymaps (2)

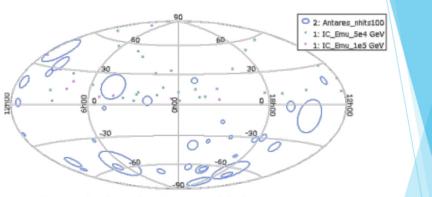


Credits: Giuseppe Greco (INFN)

- Help to define follow-up strategy
  - Visualize, tile and combine skymaps with other information (e.g., galaxy catalog for "mass targetting")
  - On-going collaboration to demonstrate usage of VO tools (Multi Order Coverage Map)
  - Skymaps will soon include a distance estimate for binary mergers



#### **Slides presented in Heidelberg**



Correlation between high energy IC40 events (Emu> 100TeV) and Antares high energy events (nhits>100)



## Impacts

- ESFRI pathfinder data publication in the VO
- Usage of VO-enabled tools by the ESFRIs for their own needs
- VO building blocks in the ESFRI systems (economy of scale!)
- Progress of the IVOA standards and tools (e.g. HiPS sky tessellation, multi-D standards, Provenance, A&A)
- The ESFRIs become actors of the VO so that it takes their requirements fully into account
- Dissemination of VO knowledge in the community
- Excellent science: the integration of astrophysics and astroparticle data is at the forefront



## Expectations

- The initial expectations will be fulfilled
- DADI will have a legacy
- ESFRI and pathfinders fully involved in the VO
- Astronomy/astroparticle projects working hands in hands with common goals
- Wrt. Science community: the VO is and will be here and used but invisible because seamless access is the aim



## 4.8 Repository of DADI products

- School tutorials
- IVOA standards
- Publication tools
- Applications