

# Astronomy & Astrophysics EGEE-III Cluster

## Conclusions

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	PM	FTE	Cost (€)	Cut (%)
FZK	0	0,00	0	100%
IFAE/PIC	12	0,50	30.132	---
CSIC	12	0,50	38.365	33%
INAF	18	0,75	38.783	28%
RUG	12	0,50	32.095	0%
II-SAS	12	0,50	30.836	0%
CNRS	0	0,00	0	100%
UIBK	0	0,00	0	100%
IPB	0	0,00	0	100%
	<b>66</b>	<b>2,75</b>	<b>170.211</b>	<b>45%</b>

<b>IFAE/PIC</b>	<b>The MAGIC application: gridification of database and data pipeline</b>
<b>IFCA</b>	<b>Analysis of simulated Planck data:</b> <ul style="list-style-type: none"> <li>- detection of extragalactic compact sources</li> <li>- Gaussianity</li> </ul>
<b>CESNET</b>	<b>Activity related to the Pierre Auger Cosmic Ray Observatory</b>
<b>RUG</b>	<b>Gridification of the LOFAR Project and of Astro-Wise</b>
<b>II-SAS</b>	<b>- Gridification of a pool of applications (SWIFT and others).</b> <b>- Usage of DIANE for parametric applications.</b>

**INAF  
&  
Italy**

- **Planck simulations.**
- **Gridification of codes for galaxy formation at high redshift.**
- **Population of the BaSTI Database via Grid-enabled codes. Porting in Grid of FRANEC, the evolutionary code used to feed simulated data to the database.**
- **Implementation of Virtual Observatory standards using gLite middleware.**
- **DAME, a very good example of scientific gateway through which it is possible to use the Grid for data-mining; it was developed and is currently maintained through a collaboration between University of Naples Federico-II and INAF**

**OBSPM  
&  
France**

- **HORIZON project: Cosmological parameters inference, Dark energy and large scale structure formation, Study of re-ionization epoch by Monte Carlo radiative transfer, Dynamics and formation of Galaxies, GalMer project**
- **HERSCHEL-ALMA project: Quantum codes, Meudon PDR code**
- **Celestial Mechanics projects: Chaotic diffusion in the Solar System, Forecasting meteor showers, Long term evolution of comets**
- **High Energy Astrophysics: CTA design study**
- **Virtual Observatory and Grid: Online access to simulation codes on the Grid via the Virtual Observatory. Massive data mining to seek for solar system objects**

VO	Comments
ams	---
ams02.cern.ch	(no comments)
argo	---
astro.vo.eu- egee.org	This is the catch-all VO of the A&A VRC, thought to offer services and resources to novice users who approach the Grid for the first time and cannot rely on their own resources yet.
astron	Increase expected.
astrop	---
auger	
dca.euro-vo.org	---
des	---
eirevo.ie	---
glast.org	no contact / probable contact in future

VO	Comments
icecube	None. Hope, it will increase
inaf	The inaf VO is dedicated to the Grid community of the Italian National Institute of Astrophysics who also leads the A&A VRC. Strong increasing contacts are therefore foreseen in EGI.
lofar	Increased contact expected.
magic	Actual level is medium
pamela	---
planck	The planck VO is managed by the same pool of people who have had in charge the coordination of the A&A VRC so far. In EGI it is expected a reinforcement of the coordination/contacts between the VRC and its related VOs and this is obviously valid for planck.
virgo	---
vo.apc.univ-paris7.fr	It's a local VO, which permits local users to run their applications on grid computing infrastructure. Our users use also other VO as VO Virgo, VO Auger. Collaboration with VRC should increase after the end of EGEE III.
vo.cta.in2p3.fr	increase
vo-helio-vo.eu	---
vo.hess-experiment.eu	---
vo.paus.pic.es	---

- **Some groups contributed as unfunded partners (France, CESNET)**
- **Impossible to achieve a significant progress due to the shortage of funds**
- **Goals achieved only partially**
  - Tools and services to meet A&A application requirements
  - Portals and Gateways
  - Massive training and dissemination
  - Synergy between Grid and other VRCs / Technologies (i.e. VObs, HPC) to be improved



- **Interactions with your NGIs for**
  - Support (applications porting and resources)
  - Training and dissemination
  - New tools and services
- **ESFRIs**
  - They (CTA, SKA, E-ELT, PRACE) can be the right environmental context where a Grid based VRC can grow...but this task could be not trivial
- **In case of A&A, Grid activity could be wrapped within VObs and its related projects**

- **Common collaboration tools**
  - Wiki pages (moved to EGI or to INAF)
    - <https://twiki.cern.ch/twiki/bin/view/EGEE/AstronomyAndAstrophysics>
  - Mailing lists
    - [project-eu-egEE-na4-aa@cern.ch](mailto:project-eu-egEE-na4-aa@cern.ch)
    - [project-eu-egEE-na4-aa-ref@cern.ch](mailto:project-eu-egEE-na4-aa-ref@cern.ch)
- **Coordination of A&A VOs**
  - In particular it is necessary to continue the management of the catch-all VO
    - [astro.vo.eu-egEE.org](http://astro.vo.eu-egEE.org)

- **A special thank to funded partners**
  - PIC
  - II-SAS
  - RUG/KAI
  - IFCA
  - INAF
- **... to unfunded partners, with a special mention for**
  - OBSPM and the French Community
  - CESNET and AUGER project
- **... and to all other contributors of the A&A cluster**