



# Infrastructures as means for advancing research and education

Federico Ruggieri

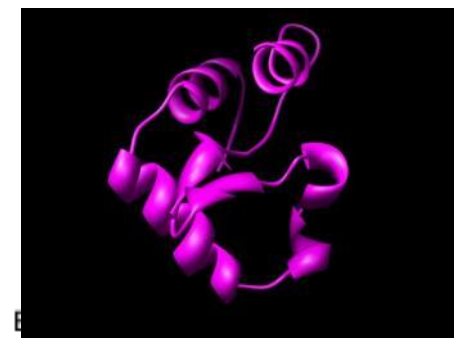
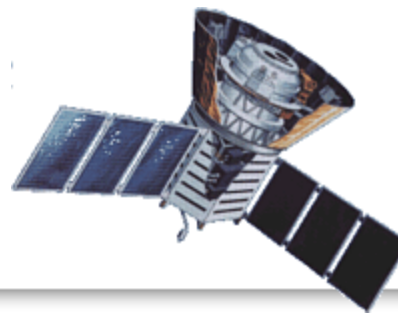
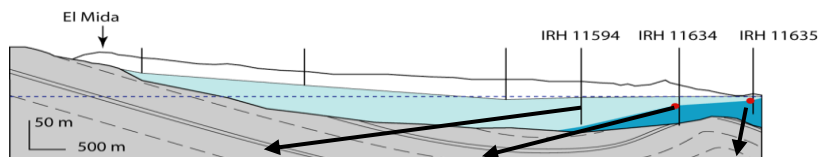
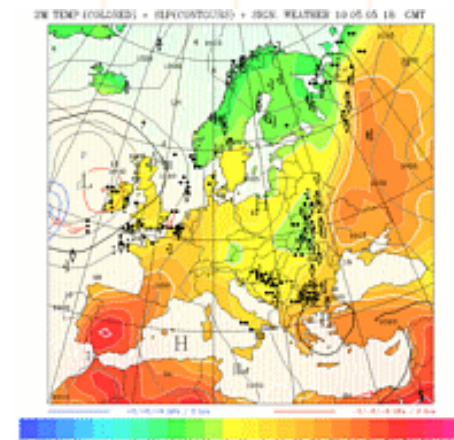
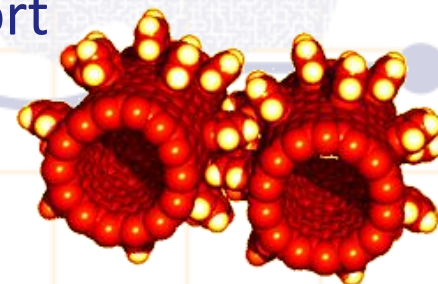
Project Director, INFN

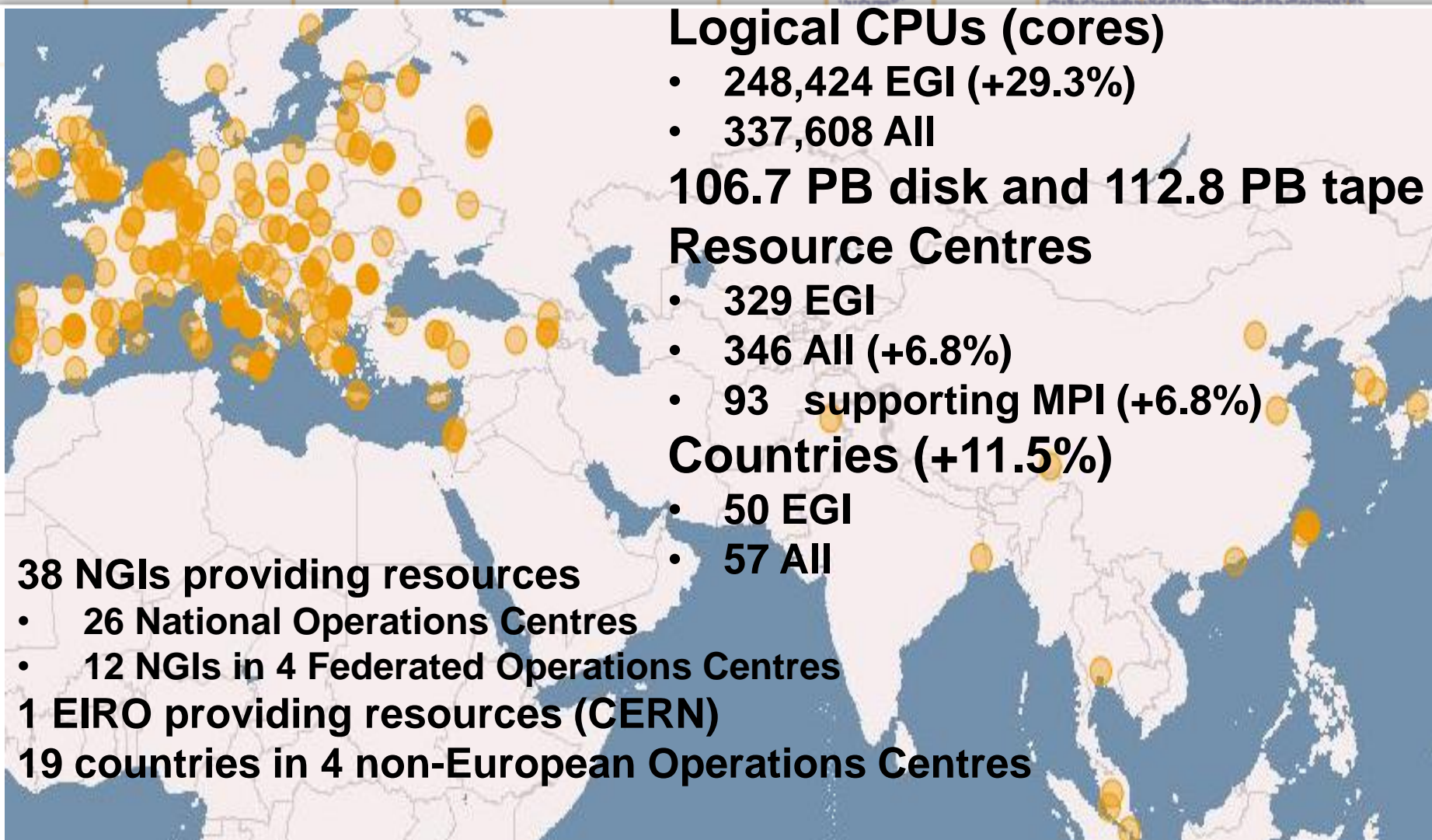
e-AGE: 1st International Platform on Integrating Arab e-Infrastructure in a Global Environment

Amman 12-13 December 2011

# Computing intensive science

- Many research challenges require community effort
  - Physics & Fundamental properties of matter
  - Genomics
  - Climate change modelling
  - Medical diagnostics and drug discovery
- Research is increasingly digital, with increasing amounts of data
- Computation ever more demanding with GPU and many cores CPU
- International/intercontinental collaborations need truly interoperable infrastructures across the world





## Logical CPUs (cores)

- 248,424 EGI (+29.3%)
- 337,608 All

## 106.7 PB disk and 112.8 PB tape Resource Centres

- 329 EGI
- 346 All (+6.8%)
- 93 supporting MPI (+6.8%)

## Countries (+11.5%)

- 50 EGI
- 57 All

## 38 NGIs providing resources

- 26 National Operations Centres
- 12 NGIs in 4 Federated Operations Centres

## 1 EIRO providing resources (CERN)

## 19 countries in 4 non-European Operations Centres

# Project summary information

- Support Action co-funded by European Commission under: Capacities specific program - Research Infrastructures - FP7-INFRASTRUCTURES-2009-1
- Project ID 246589
- Duration: 24 months
- Started: 1<sup>st</sup> January 2010
- Total Cost: in excess of 840,000 €
- EU contribution: 740,000 €

## 14 Partners + 2 Third Parties from 13 Countries

### [ Partners & Third Parties ]



CCK



CYNET



IUGAZA



CERIST



EUN



TÜBİTAK,  
ULAKBİM



CNRS-IDG  
HealthGrid



JUNET\_



TRUST-IT



CNRST\_



HIAST



University of Malta

# EUMEDGRID countries & operating sites



# Africa & Arabia ROC

(<http://roc.africa-grid.org>)



The screenshot shows the website header for the Africa & Arabia Regional Operation Center. It features a green navigation bar with the text "Africa & Arabia ROC" and "Regional Operation Center" below it. To the left is a small map of Africa. To the right are three logos: a globe with Africa highlighted, the emblem of the Arab League, and the European Union flag. Below the navigation bar is a dark grey menu with the following items: Home, User Pages, Site Manager Pages, Virtual Organisations, Grid Services, Monitors, User Support, and Contact Us.



- Support of Users and Site Administrators
- Same tools of EGI
- Set up in collaboration with SAGrid, EUMEDGRID-Support, CHAIN, EPIKH. ...

**Visit:**

[www.eumedgrid.eu](http://www.eumedgrid.eu)



The screenshot shows the EUMEDGrid website homepage. At the top is the EUMEDGrid Support logo. Below it is a navigation menu with links: HOME, ABOUT, REPORT, VIDEOS, MEDIA CENTRE, EVENTS, COMMUNITY, HISTORY OF EUMED, and WIKI. The main content area features a 'State of the Art: Europe & Med' section with sub-links for Infrastructure, Application support, Collaboration and Training, and News. A central article titled 'Sustainability of e-Infrastructures across the Mediterranean' is highlighted with a 'Top' badge. To the right, there is an 'Upcoming Events' section listing a 'EUMEDGRID-Support Kick-Off' meeting on 25-28 January 2010 in Cairo, Egypt. On the left side, there are sections for 'Latest Updates' (showing 'No Documents') and 'Most read' (listing 'Collaboration and Training', 'Programme', and 'EUMEDGRID-Support Kick-Off & EUMEDCONNECT2 Meeting'). At the bottom, there is a 'Who is online' section showing 'We have 7' users.

**Contact:**

Federico Ruggieri (Project Director)  
[Federico.Ruggieri@roma3.infn.it](mailto:Federico.Ruggieri@roma3.infn.it)

Mario Reale (Technical Manager)  
[Mario.Reale@garr.it](mailto:Mario.Reale@garr.it)

Sara Garavelli (Dissemination)  
[s.garavelli@trust-it-services.com](mailto:s.garavelli@trust-it-services.com)

Riccardo Bruno (Applications)  
[Riccardo.Bruno@ct.infn.it](mailto:Riccardo.Bruno@ct.infn.it)

Roberto Barbera – EPIKH  
[Roberto.Barbera@ct.infn.it](mailto:Roberto.Barbera@ct.infn.it)