



## Access to HPC resources in Italy and Europe

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### Access to HPC resources: CINECA aims and basic principles

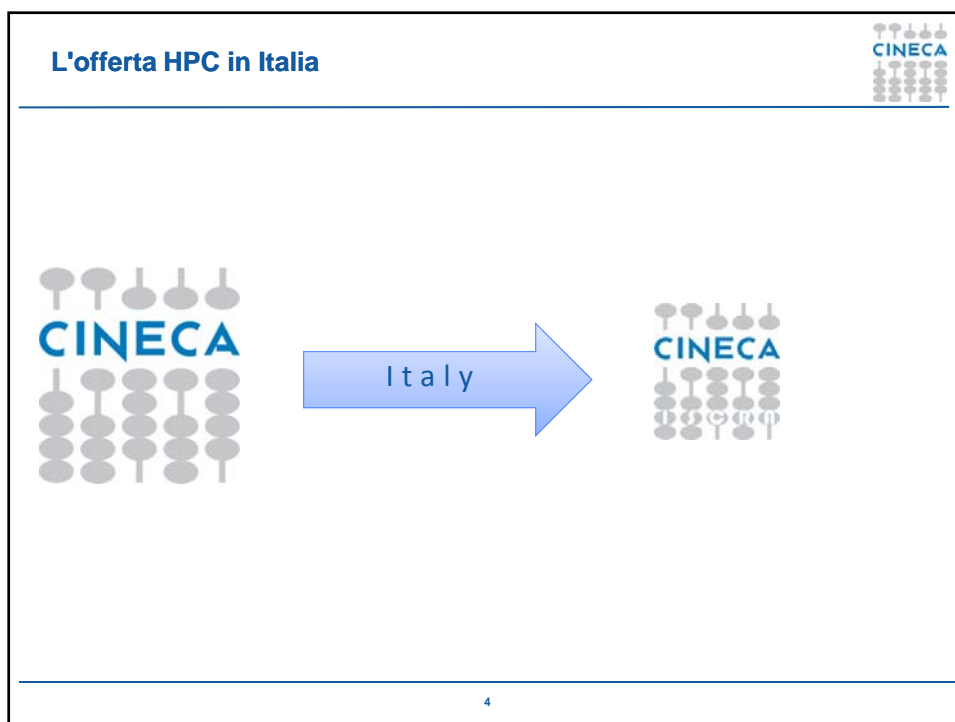
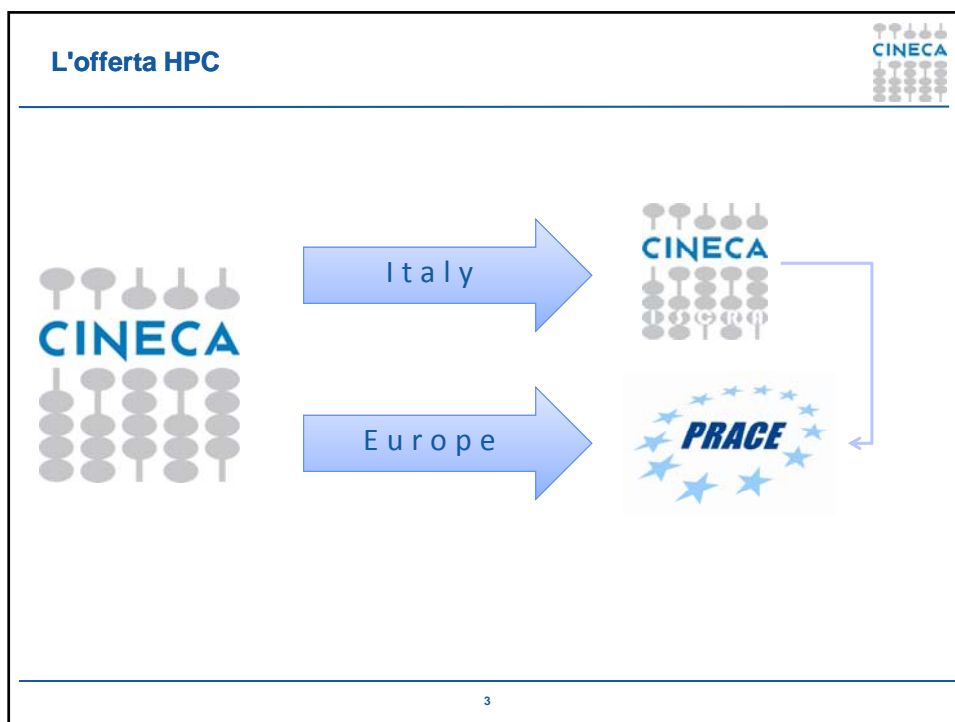


#### Our objectives:

- ✓ Providing Italian and European researchers with an advanced computational environment
- ✓ Supporting Italian researcher for increasing their competitiveness
- ✓ Following Italian researchers in their path towards Tier 0
- ✓ Soliciting large-scale and computationally intensive projects

#### Basic principles:

- ✓ Transparency
- ✓ Fairness
- ✓ Conflict of Interest management
- ✓ Confidentiality



## HPC offer in Italy: ISCRA Italian SuperComputing Resource Allocation



The aim of ISCRA is to ensure adequate support to Italian scientists and engineers.

The allocation is of 200M core hours per year on

- FERMI

The access is by

- Online submission of proposals
- Peer-review process by an international panel

The proposals are scientifically evaluated by international reviewers and technically evaluated by Cineca experts.

Applications and codes are evaluated on the basis of their computational readiness.

## HPC offer in Italy: ISCRA



**Class B:** Standard Projects; two calls / year  
1M < core hours < 10M  
typical request 5M core hours  
duration: 12 months

**Next call will be: 15 June - 17 July.**

## HPC offer in Italy: ISCRA



- Class C:** Small Projects
- continuous submission, 2 selection per year
  - >50.000 core hours
  - typical request 1M on FERMI
  - typical request 200.000 on GALILEO
  - PICO: bioinformatics domain or data visualization and post-processing
  - only one C project approved per year
  - duration: 9 months
- Trial:** on demand

## HPC offer in Italy: ISCRA Call for proposals calendar

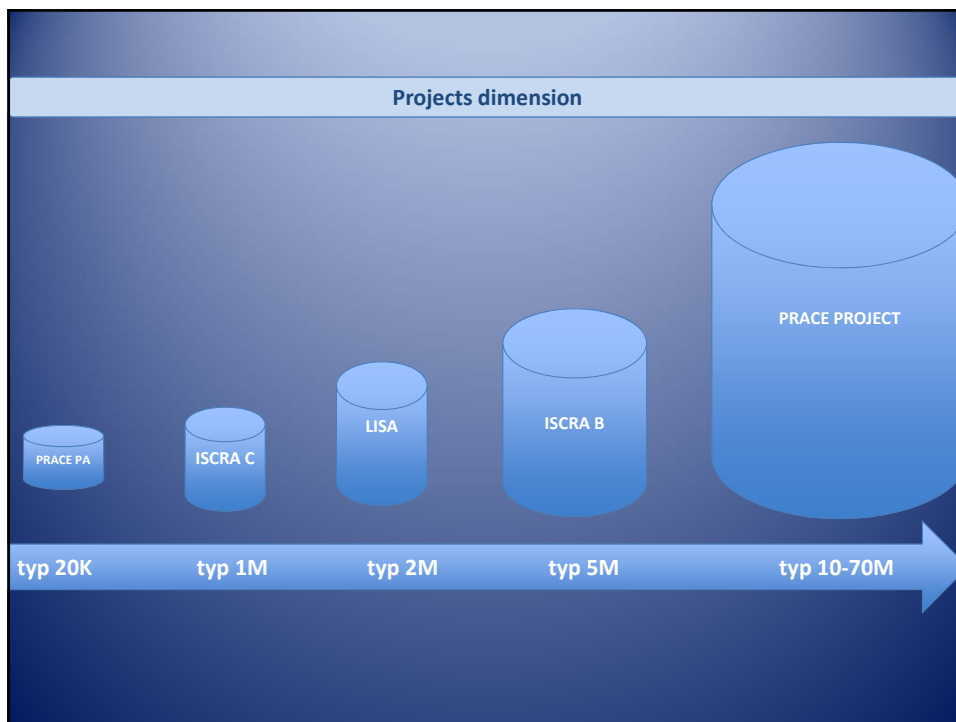


### Call for Projects B

- Next Scientific Committee 14 May 2015
- Next deadline 17 July 2015

### Call for Projects C

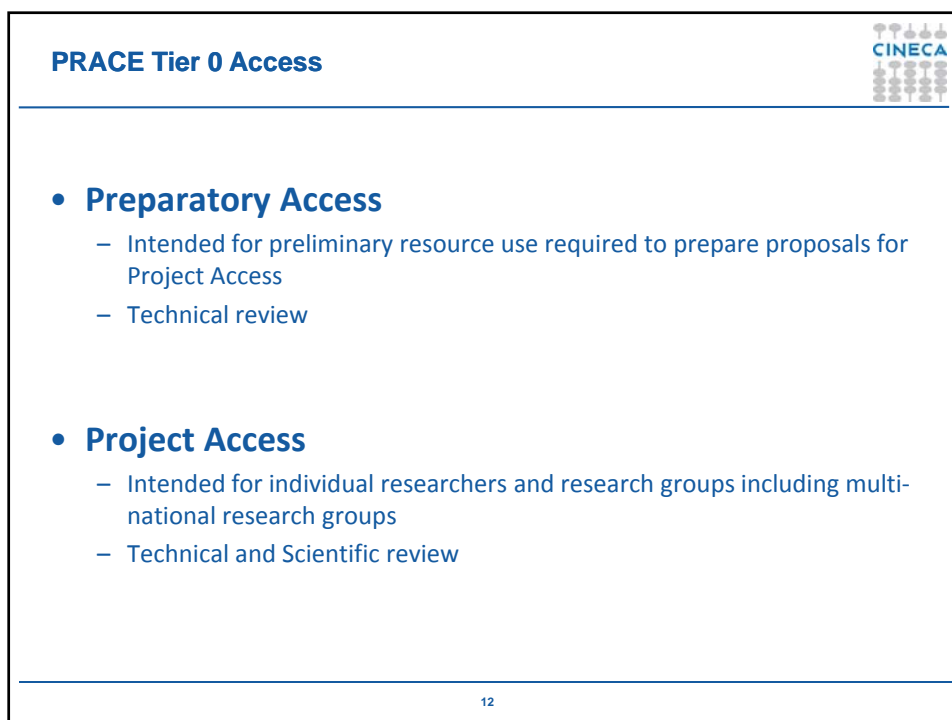
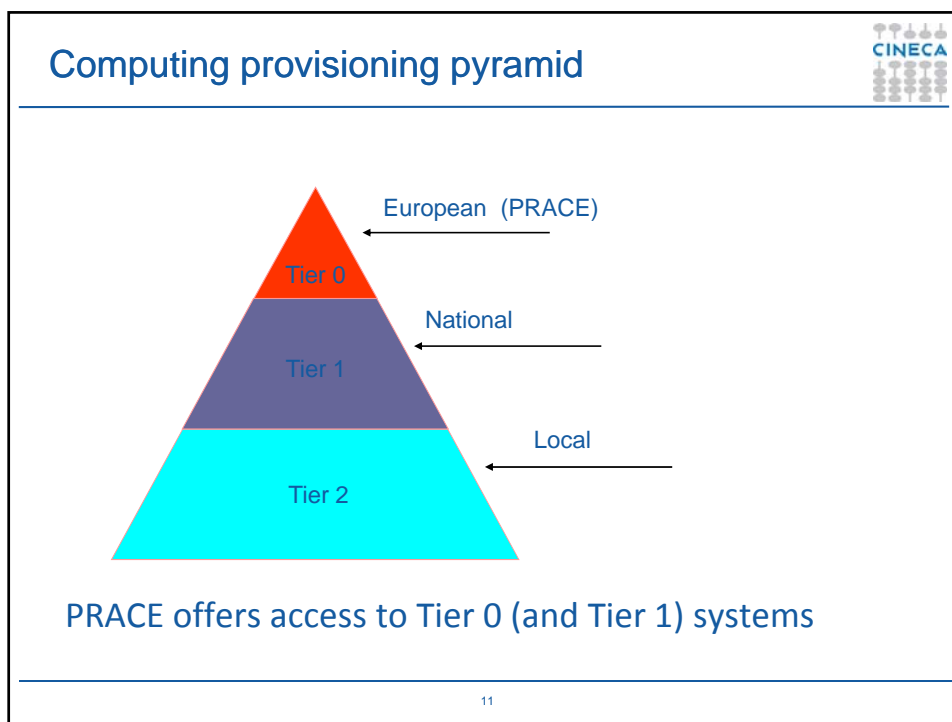
- continuously open, evaluation every month
- next evaluation after 15 April 2015



**L'offerta HPC in Europa: PRACE**

The diagram illustrates the expansion of CINECA's HPC offerings into Europe. On the left is the CINECA logo, which consists of a grid of grey circles above the word 'CINECA'. A large blue arrow labeled 'Europe' points from the CINECA logo to the PRACE logo on the right. The PRACE logo features the word 'PRACE' in a bold, italicized font, surrounded by a circle of blue stars, similar to the European Union flag.

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## PRACE Tier 0 Access: CURRENT CALL



- Applications accepted on call
- For projects which use codes that have been previously tested and must have demonstrated high scalability and optimisation
- Next call
  - **Closing: March 18<sup>th</sup>, 2015, 12:00 CEST – Just CLOSED**
- Final report mandatory after the end of the access

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## PRACE Access: Tier 0 systems available in the 6<sup>th</sup> call



### Resources available in PRACE (Tier-0)

- “FERMI” (CINECA, Italy) IBM Blue Gene/Q
- “JUQUEEN” (GCS@Jülich, Germany) IBM Blue Gene/Q
- “CURIE” (GENCI@CEA, France) Bull x
- “HERMIT” (GCS@HLRS, Germany) Cray X6E
- “SuperMUC” (GCS@LRZ, Germany) IBM System x iDataPlex
- “MareNostrum” (BSC, Spain) IBM System X iDataplex

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**Useful links**



- IS CRA: <http://www.hpc.cineca.it/services/iscra>
- PRACE: [www.prace-ri.eu/hpc-access?lang=en](http://www.prace-ri.eu/hpc-access?lang=en)
- [p.alberigo@cinca.it](mailto:p.alberigo@cinca.it) [iscra@cinca.it](mailto:iscra@cinca.it)