

ChEESE

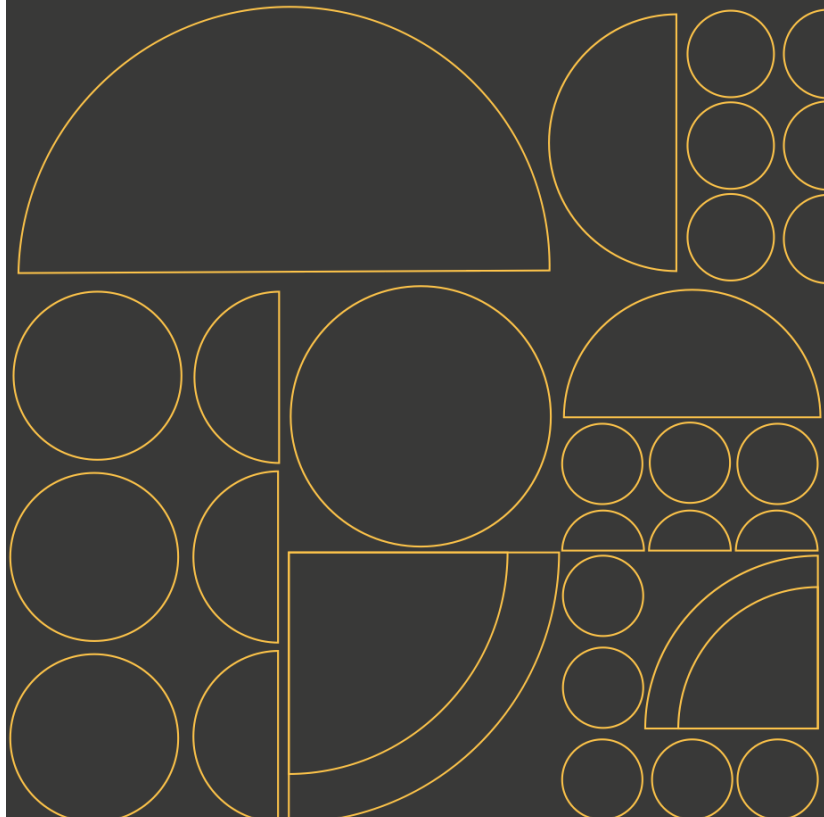
CINECA: (very) brief presentation

Project kick-off meeting Barcelona
19-20 January 2023

Giorgio Amati
Piero Lanucara
CINECA/ Rome Branch

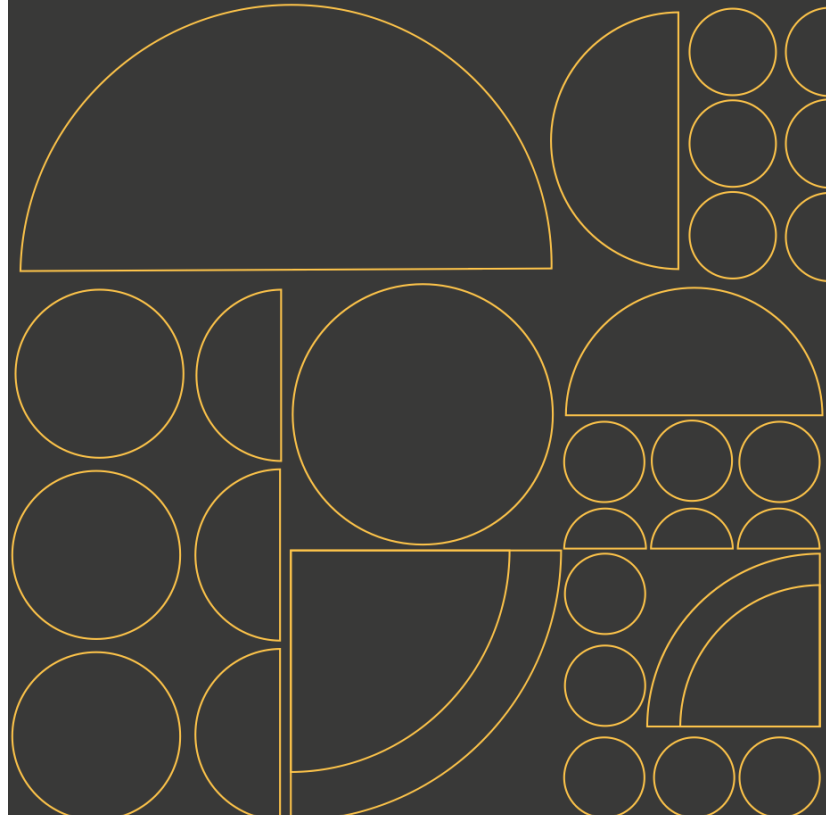


Project funded by EuroHPC under the grant agreement No 101093038.



Agenda

- CINECA in Cheese2P
- HW/1: Leonardo
- HW/2: Lisa



CINECA@ChEESE-2P

Work Package	Task
WP1: Project Management	T1.1,T1.2,T1.3,T1.4
WP2: Exascale technical challenges in flagship codes	T2.1, T2.2,T2.3
WP3: Co-design with European HPC vendors and technologies	T3.1 ,T.3.2
WP4: Simulation ecosystem	T4.3
WP5: Farming Pilot Demonstrators	
WP6: SCs and service enabling using EuroHPC infrastructures	T6.2,T6.4
WP7: Dissemination, outreach and capacity building	T7.1,T7.2,T7.3,T7.4,T7.5

CINECA@ChEESE-2P (in detail)

- T1.1: Administrative and financial Management
- T1.2: Operational decision making
- T1.3: Equality committee
- T1.4: Management of computational resources
- T2.1: Code audits
- **T2.2: Increasing the performance portability of flagship codes for different accelerators**
- **T2.3: Optimization for Exascale**
- **T3.1: Preparation of mini-apps**
- T3.2: OpenSequana prototypes
- **T4.3: Development, deployment and quality assessment tools**
- T6.2: Exascale capability simulation cases and Scientific Grand Challenges
- T6.4: EuroHPC urgent computing service enabling
- T7.1: Dissemination and communication planning tools
- T7.2: Liaison activities
- T7.3: Training activities
- T7.4: Community building and roadmap activities
- T7.5: Sustainability plan



HLST@CINECA FOR EARTH

Support to Meteo/Climate and Solid Earth projects/activities
Focus on GPU porting and performance portability technology adoption

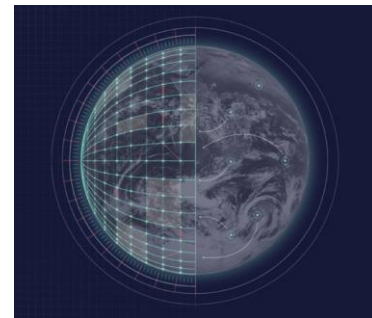
- ChEESE 2P
- [DT-GEO](#)
- [Geo-Inquire](#)
- [Italy's Destination Earth's innovative technology adoption](#)



ChEESE

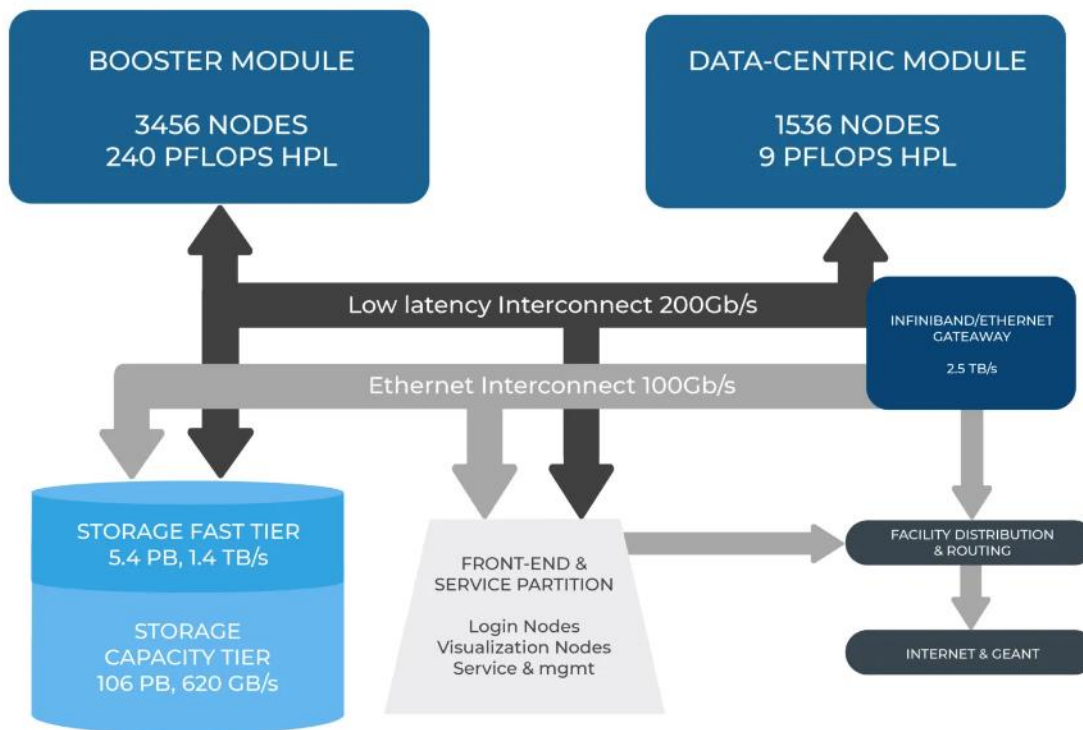


DT-GEO



LEONARDO

Ranked Text: 4th in 11/2022 Top500 list



Booster Module

Available from 2Q2023

3456 Compute Nodes, each of them:

- 1x Intel Xeon 8358 32 core@2.6 GHz
- 512 GB RAM DDR4 3200 MHz
- 4x NVidia A100-64GB HBM2
- 2x Card NVidia HDR 2×100 Gb/s



Data-Centric Modules

Available from 2H2023

1536 Compute Nodes, each of them:

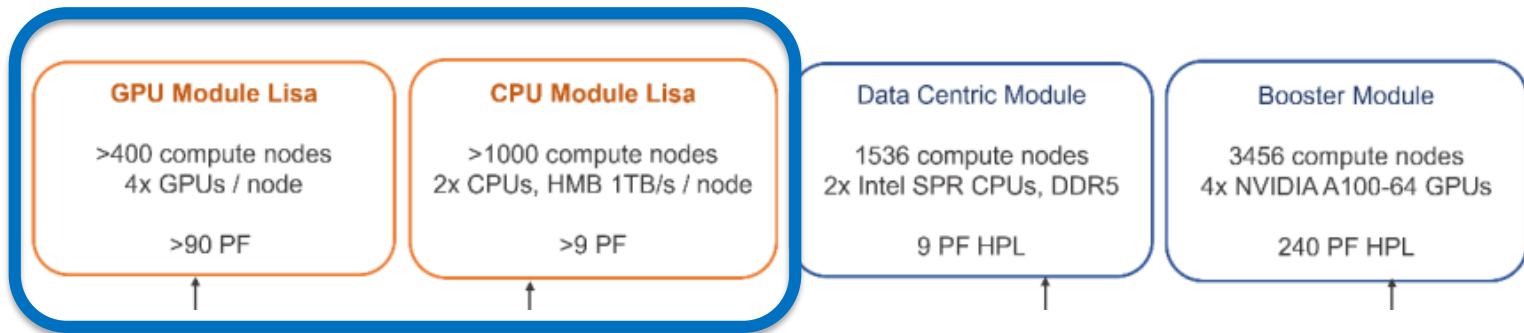
- 2x Intel Sapphire Rapids, 56 core
- 512 GB RAM DDR5 4800 MHz
- 1x NVidia HDR100 100 Gb/s card
- 8 TB NVM



LISA:

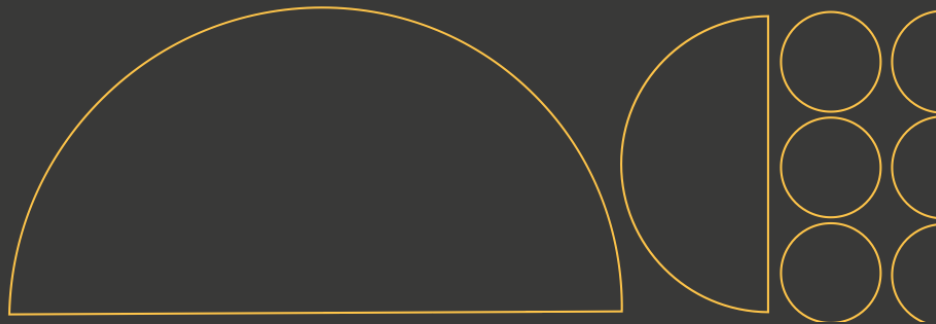
Leonardo Improved Supercomputing Architecture

- Co-Founded by JU at 35%
- planned for 2024
- CFI will start soon



Thank you!

Any question?



@cheese-coe



<http://cheese2.eu>



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