Access LEONARDO @ CINECA

SCIENTIFIC &
DATA-INTENSIVE COMPUTING

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Advanced HPC 2023-2024 @ Università di Trieste

The Leonardo cluster

leonardo-supercomputer.cineca.eu

Rank	System	Cores	Rmax (PFlop/s)	Rpeak (PFlop/s)	Power (kW)
1	**Frontier** - HPE Cray EX235a, AMD Optimized 3rd Generation EPYC 64C 2GHz, AMD Instinct MI250X, Slingshot-11, HPE DOE/SC/Oak Ridge National Laboratory United States	8,699,904	1,194.00	1,679.82	22,703
2	**Aurora** - HPE Cray EX - Intel Exascale Compute Blade, Xeon CPU Max 9470 52C 2.4GHz, Intel Data Center GPU Max, Slingshot-11, Intel DOE/SC/Argonne National Laboratory United States	4,742,808	585.34	1,059.33	24,687
3	**Eagle** - Microsoft NDv5, Xeon Platinum 8480C 48C 2GHz, NVIDIA H100, NVIDIA Infiniband NDR, Microsoft Microsoft Azure United States	1,123,200	561.20	846.84	
4	**Supercomputer Fugaku** - Supercomputer Fugaku, A64FX 48C 2.2GHz, Tofu interconnect D, Fujitsu RIKEN Center for Computational Science Japan	7,630,848	442.01	537.21	29,899
5	**LUMI** - HPE Cray EX235a, AMD Optimized 3rd Generation EPYC 64C 2GHz, AMD Instinct MI250X, Slingshot-11, HPE EuroHPC/CSC Finland	2,752,704	379.70	531.51	7,107
6	**Leonardo** - BullSequana XH2000, Xeon Platinum 8358 32C 2.6GHz, NVIDIA A100 SXM4 64 GB, Quad-rail NVIDIA HDR100 Infiniband, EVIDEN EuroHPC/CINECA Italy	1,824,768	238.70	304.47	7,404

3456 boost nodes

1x
- Intel Xeon 32cores
- 8x64 GB DDR4 3.2GHz

4x
- Nvidia Ampere
- 64GB HBM2 (gpu)

2x
- Nvidia HDR 2x100Gb/s

1536 data-centric nodes

2x
- Intel Saphire Rapids 56cores
- 48x32 GB DDR5 4.8GHz

3x
- Nvidia HDR 1x100Gb/s

Getting a user

3 simple steps:

1. register at CINECA
   User Registration Page

2. once you have your user, set-up the 2FA (mandatory)
   Connecting with 2FA

3. let us know about your user name so that we can add you on a project

that's all, have fun