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Leonardo: A Simulator4Earth

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The European supercomputer Leonardo is one of the three pre-exascale systems announced by EuroHPC Joint Undertaking and will be a significant step forward in raising European research in the field of computational science. CINECA has a long history in supplying the most powerful supercomputers in the world. The strong partnership with the EuroHPC initiative has led to the realization of the Leonardo project, a significant step forward in raising European research in the field of computational sciences.

Leonardo (ranked 4th in the last Top500 list), hosted and managed by CINECA's new data center located in the Technopole of Bologna, will be fully operational within the summer of this year.

Leonardo will have a strategic role in fostering national and international initiatives with a clear focus on Earth Science, actively supporting relevant projects and activities like the second phase (2023-2026) of the EuroHPC Center of Excellence for Exascale in Solid Earth (ChEESE-2P)¹, Geo-INQUIRE², DT-GEO³ and Destination Earth among the others.

In this talk, the Leonardo systems will be introduced, together with the way how CINECA will actively support the scientific ecosystem with emphasis on the support to the Earth community.

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[2] 2022-2024, GA No 101058518

[3] 2022-2025, GA No 101058129