

# WORKSHOP

# "SCIENTIFIC HPC IN THE PRE-EXASCALE ERA"

PART OF ITADATA 2024 CONFERENCE, PISA, 17-19 SEPTEMBER 2024

18 SEPTEMBER 2024



**Welcome  
everyone!!! 😊**

# WORKSHOP MOTIVATION

Data produced from current and future experiments are steeply and quickly increasing in volume, also requiring **~100 PB of storage**, representing the so called “**Big Data**”.

**Example:** the future radiotelescope Square Kilometer Array (SKA) will produce ~700 PB/year.



SPDO/TDP/DRAO/Swinburne Astronomy  
Productions - SKA Project Development  
Office and Swinburne Astronomy  
Productions.

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- Artificial Intelligence techniques.
- Hardware and software to efficiently manage heavy I/O operations.
- Green computing.

## TWO SMALL REMARKS

- During the workshop, a staff composed of two people from Società Astronomica Italiana (SAit) VideoMEMORIE will record your talks that will be transformed after the conference in non-refereed proceedings with a DOI and will be published on SAit website (<https://www.memsait.it/>) and on Astrophysics Data Systems.
  - ❖ **N.B.!!! If you do not agree that the recordings will be included in the proceedings, write an e-mail before September 25<sup>th</sup> 2024 to [memsait.editorialboard@inaf.it](mailto:memsait.editorialboard@inaf.it)**
- At the end of the workshop, subject to being on time with the schedule, we have programmed a 1 hour discussion where you are free to ask further questions to deepen topics of your choice.