

Technology Tracking Working Group

Einstein Telescope E-Infrastructure Board Workshop
Aachen, March 9-10 2023

General information

Scope: track the evolution of hardware, middleware and software technologies

Chair: S. Vallerio (INFN Torino)

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List subscription: <https://mail.ego-gw.it/mailman/listinfo/et-eib-ttg/>

Wiki page: <https://wiki.et-gw.eu/EIB/TechnologyTrackingWorkingGroup/WebHome>
(work in progress)

Activities

- The working group is a coordinated **cross-division effort**
 - We aim at involving (at least) one representative per division
- Review and present to the EIB promising new technologies of possible **benefit for the different divisions'** activities → *see the ESCAPE Virtual Research Environment presentation later today*
- Review and present to the EIB strategies and tools to enhance **environmental sustainability**
- Work in synergy with the other EIB divisions to realise **Proof of Concept** solutions based on new technologies of interest
 - This activity will leverage, among others, the **ET R&D cluster** that will be made available at INFN Torino in the following months
 - The cluster will be funded by the ETIC (ET Infrastructure Consortium) PNRR project

Supporting divisions' activities

DIV 1 - Software, frameworks, and data challenge support

- Software best practices and quality policies: survey of what is being used right now.
- Code distribution: alternatives to CVMFS.
- Data distribution: investigate ESCAPE DataLake.
- Workflow management on distributed resources (medium/long term task): what is being used by other experiments.

DIV3 - Computing and data model, Resource Estimation

- Analysis of current 2nd generation experiments computing models.
- Strategies for accelerated computing.

DIV4 - Multimessenger alerts and low-latency infrastructure

- Alert brokers, distributors
- Virtual Observatory
- Survey software infrastructures for MM community
- Heterogeneous computing
- Automated pipelines (i.e. Wavefier)
- Dynamic databases
- Time sensitive nets (White Rabbit)
- ML tools