

euro TPC
AI FOR SCIENCE

Europe's coordinated voice for AI for science

Connecting Europe's AI, HPC and scientific communities within the Trillion Parameter Consortium (TPC) to shape the future of trustworthy, open and science-driven AI.

Our mission

EuroTPC is the first coordinated European initiative supporting participation in the Trillion Parameter Consortium (TPC), a global collaboration **developing large-scale AI models** for scientific discovery.

- **Establish and operate a TPC Office in Europe**
- **Foster synergy between TPC and major European efforts in the global HPC-AI activity**
- **Support active participation of European actors in TPC technical and scientific activities**
- **Engage and mobilize a broad European HPC-AI ecosystem**
- **Develop a strategic foresight mechanism and a shared EuroTPC Roadmap**
- **Promote international collaboration and visibility**

Funded by the EuroHPC Joint Undertaking, EuroTPC strengthens **European leadership in AI for science** by connecting Europe's leading HPC centres, AI Factories, research institutions and international partners.

Partners



BSC-CNS
Barcelona Supercomputing Center - Centro Nacional de Supercomputación
Barcelona · Spain · Coordinator

Neovia
Neovia Innovation
Paris · France

CINECA
CINECA Inter-University Consortium
Bologna · Italy

CSC
Finnish IT Center for Science
Espoo · Finland

LRZ
Leibniz Supercomputing Centre of the Bavarian Academy
Munich · Germany

Get involved through the EuroTPC Office:

- Participate in Events
- Join Working Groups
- Become an External Expert
- Follow for Updates

Barcelona Supercomputing Center · Neovia Innovation · CINECA · CSC · lrz

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TPC activities

euro TPC AI FOR SCIENCE

- Workshops at SC, ISC, SC Asia
- Hackathons across 3 continents
- Tutorials
- Annual all-hands conference
- Technical working groups

To see the full list of events to date and upcoming ones, visit tpc.dev/tpc-events/

TPC worldwide

90+ organizations and growing →

45% public research centers

40% universities

10% private companies

5% non-profits

TPC working tracks

EuroTPC is working to facilitate European participation in multiple, ever-evolving TPC working tracks:

1. **Infrastructure to Enable Shared Data and Computing (SHAR)**
   To support foundation model training and further fine-tuning for general-purpose and domain-specific settings.
2. **Model Architecture and Performance Evaluation (MAPE)**
   To build frontier-scale AI, harnessing distributed resources and ensuring that all core components are openly available.
3. **Open Frontier AI Systems (FAST)**
   To incorporate reasoning models and develop knowledge graphs, agentic systems, orchestrations, simulators and experiments.
4. **AI Software Infrastructure/Frameworks (SOFT)**
   To support Tracks 2 and 3, while integrating with experimentation platforms, laboratories, instruments, and other real-world scientific environments.
5. **Evaluating Model Skills, Knowledge, Reasoning, and Safety (EVAL)**
   Develop an open suite of tools, methods, and benchmarks for evaluating scientific skills, knowledge, reasoning, capabilities and safety/security.
6. **Driving Challenge Applications (APPS)**
   For driving and evaluating Tracks 1 to 3 in particular scientific challenge applications, aiming for diversity on multiple axes, including industry.
7. **Training- and Deployment-Level Safety and Alignment (SAFE)**
   Focusing on mechanisms that align with scientific objectives and constraints, and broader societal values, at scale and in high-impact settings.
8. **Expanding and Deepening the AI Workforce (WORK)**
   To achieve Tracks 1 to 7, with attention to emerging roles across the frontier AI stack, and evolving needs across all career stages.

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EuroHPC Joint Undertaking

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