TURING

NEWSLETTER NO 2

October 2026 - M14

Trustworthy Unified Robust Intelligent Generative Systems



Advancing trustworthy, physics-aware AI for complex physical systems

This project has received funding from the Horizon Europe Framework Programme (2021-2027) under the **grant agreement No 101215032**.

One Year of TURING: From Concept to Implementation

In September 2026, TURING entered its second year with important scientific and technical foundations in place. The consortium analysed its **five use cases**, defined user and technical requirements, and established the initial **TURING Framework architecture** to guide implementation across the project.

Research has progressed in physics-informed modelling, robustness, explainability, uncertainty quantification and efficient AI inference. The next phase focuses on implementing and integrating software components, preparing the use cases and advancing experimental validation.

Scientific Publications & Open Science

TURING has produced **3 journal publications, 1 joint journal publication and 9 conference publications (including 1 joint paper)**, addressing challenges in artificial intelligence and scientific computing.

Journal research investigates **adaptive forecasting** of complex dynamical systems, **intelligent model selection for digital twins**, and **more stable reinforcement learning** for large language models. The first joint journal publication explores **intelligent self-optimisation of Edge and IoT storage systems**.

Conference contributions span **explainability and bias mitigation in vision-language models**, multimodal classification and personalisation, human–object interaction and visual tracking. Further work examines biases in group-based reinforcement learning, adaptive deep neural networks and AI approaches to complex physical systems.

Additional outputs address **physics-informed machine learning for reactor-neutronics simulations** and **federated anomaly detection** under heterogeneous, resource-constrained conditions.

TURING supports **Open Science** through open-access research, its Zenodo community and public deliverables.

Explore our research: turing-project.eu/publications/

This project has received funding from the Horizon Europe Framework Programme (2021-2027) under the **grant agreement No 101215032**.

TURING Plenary Meeting in Heraklion

The TURING consortium gathered in **Heraklion, Greece, on 20–21 July 2026**, for its second Plenary Meeting, hosted by **IACM-FORTH**. Partners reviewed progress on the Framework architecture and software components, focusing on their functionality, integration and alignment with the project's use cases and requirements.

The meeting helped establish technical priorities and coordinate the next phase of implementation. We thank IACM-FORTH for its hospitality.



TURING Plenary Meeting, Heraklion, July 2026.

This project has received funding from the Horizon Europe Framework Programme (2021-2027) under the **grant agreement No 101215032**.

TURING-Led Scientific Sessions



9WCSCM 2026 – Sheffield, UK

On **20 July 2026**, the TURING team at ETH Zürich organised the special session **"Context-Aware Hybrid Twinning for Real-Time Engineering Decision Support"**, featuring three scientific presentations on hybrid digital twins and AI-supported engineering decisions.

Special Session S021, 9WCSCM 2026.



WCCM–ECCOMAS 2026 – Munich, Germany

On **24 July 2026**, ETH Zürich organised the minisymposium **"Adaptive Physics-Aware Models for Engineering Decision Support"**, with participation from TURING and NCOMP. Twelve presentations examined developments in physics-aware modelling for engineering applications.

Minisymposium MS209, WCCM–ECCOMAS 2026.

This project has received funding from the Horizon Europe Framework Programme (2021-2027) under the **grant agreement No 101215032**.

Scientific Events & European Synergies



IEEE ICE 2026 – Porto

On **23 June 2026**, TURING joined **AIXPERT, EXTRA-BRAIN, FAITH, HumAIne and TRUMAN** for the workshop **"Robust and Trustworthy AI is Not One-Size-Fits-All"**, discussing different approaches to AI robustness, explainability and trustworthiness.

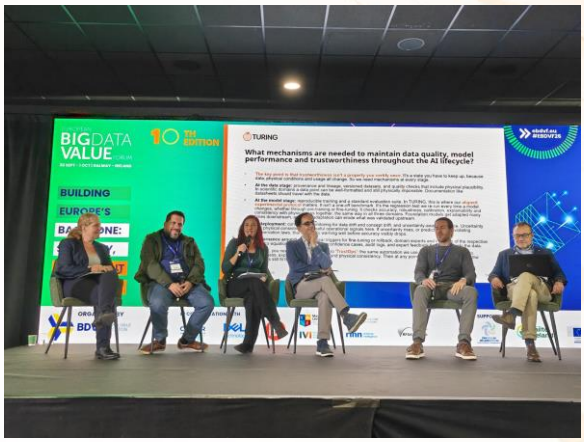
Joint workshop at IEEE ICE 2026.



ADRA Forum 2026

On **14 October 2026**, TURING took part in the European AI, Data and Robotics Forum 2026, in Porto, joining the HaDEA-organised session "AI in Strategic Sectors: Manufacturing, Mobility, Energy & Climate, Healthcare" of AI in strategic sectors, with other Horizon Europe projects.

TURING at ADRA 2026.



EBDVF 2026 – Galway

On **1 October 2026**, TURING contributed to an **AI-DAPT** session alongside **PANDORA and MANOLO**, highlighting trustworthy AI by design, physical consistency, explainability and human oversight throughout the AI lifecycle.

TURING at EBDVF 2026.

Cluster 4 – ROBUST & XAI Synergies

TURING continued its collaboration with **AIXPERT, ROBUSTIFAI and TRUMAN**, supporting exchange on robust, explainable and trustworthy AI.

This project has received funding from the Horizon Europe Framework Programme (2021-2027) under the **grant agreement No 101215032**.

Research Collaboration & Stakeholder Engagement

TURING engaged with research communities and external stakeholders through presentations and institutional exchanges. The project was showcased at the **Data Science Mini Symposium**, **Trento Local Minimum Reading Club**, **SMACT Competence Center** and the **10th International Scientific Conference on the Development of Industrial Engineering in Novo mesto**.

A meeting with **representatives of the Embassy of India** also provided an opportunity for international dialogue and exploration of research collaboration.

TURING Video Campaign

The **TURING Video Campaign** brings the project's vision, research and people closer to a wider audience through conversations with consortium researchers.

Episode 1 – Introducing TURING: The Vision Behind the Project

Konstantinos Tserpes and Ioannis Kontopoulos (ICCS/NTUA) explain the project's vision, objectives and challenges in developing trustworthy and robust generative AI.

Episode 2 – TURING: Research Scope and Scientific Ambition

Ioannis Morianos (Dienekes) explores the scientific challenges and research foundations of physics-aware generative AI.

Watch the episodes on TURING's YouTube channel. Further interviews and scientific updates will follow.

Communications and What Comes Next

Stay tuned for Newsletter No 3

- More on developing and integrating the TURING Framework components.
- More publications and scientific outputs.
- Inside information from the upcoming Plenary Meeting, 15–16 December 2026, Novo Mesto, Slovenia.

Media of TURING

Website: turing-project.eu/

Zenodo: https://zenodo.org/communities/turing-heu/records

LinkedIn: linkedin.com/company/turing-project/

X / Twitter: x.com/Turing_project

Linktree: linktr.ee/turing_project

Email: info@lists.turing-project.eu

Thank you for following TURING.

This project has received funding from the Horizon Europe Framework Programme (2021-2027) under the **grant agreement No 101215032**.