TETRIS: Progress in Action

Dear All,

The third quarter of 2026 has been a particularly intense and productive period for the entire TETRIS consortium.

Alongside ongoing scientific research and project activities, all eight partners have worked together on the preparation of the **First Periodic Report (RP1)**, covering the first 18 months of the project, while also preparing for the **3rd TETRIS General Assembly**, scheduled for 8-9 October 2026 in Stockholm, hosted by our partner Karolinska University Hospital.

In parallel, the **TETRIS project website has been completed and officially launched**, providing a dedicated platform to showcase the project's communication and dissemination activities, share scientific progress and results, and engage with researchers, healthcare professionals, patients and the wider public.

Let's take a look at the highlights from July to September!

SCIENTIFIC CONTRIBUTIONS

TETRIS at WCCM–ECCOMAS 2026: 19- 24 July

The TETRIS project was represented at the **17th World Congress on Computational Mechanics (WCCM) and 10th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS)**.

- **Francesca Arceci - Politecnico di Milano** presented:

“An Intervention-Aware Digital Twin Framework for Personalised Risk Assessment in Breast Cancer Radiotherapy.”

The research, developed in collaboration with colleagues from Politecnico di Milano, Emory University and Fondazione IRCCS Istituto Nazionale dei Tumori di Milano, introduced an approach combining clinical and treatment data, causal reasoning and probabilistic modelling. By integrating causal knowledge into Digital Twin development, the work aims to improve the reliability of patient-specific

risk predictions and support future analyses of how treatment-related factors may influence long-term side effects.

TETRIS at VPH 2026: 1- 4 September, Milan

The **Virtual Physiological Human (VPH) 2026 Conference**, hosted by Politecnico di Milano, brought together the international community working on Digital Twins, in silico medicine and personalised healthcare.

TETRIS contributed with two scientific presentations:

- **Francesca Arceci – Politecnico di Milano**

"A Causal Computational Framework for Digital Twins in Breast Cancer Radiotherapy"

- **Benedetta Dionisi Ferrera – Fondazione IRCCS Istituto Nazionale dei Tumori di Milano**

"A Genetically Adjusted Radiation Dose for the Prediction of Late Breast Fibrosis after Radiotherapy"

The two contributions highlighted complementary research approaches: computational frameworks for Digital Twins and the integration of genetic information into models predicting long-term radiation-related side effects.

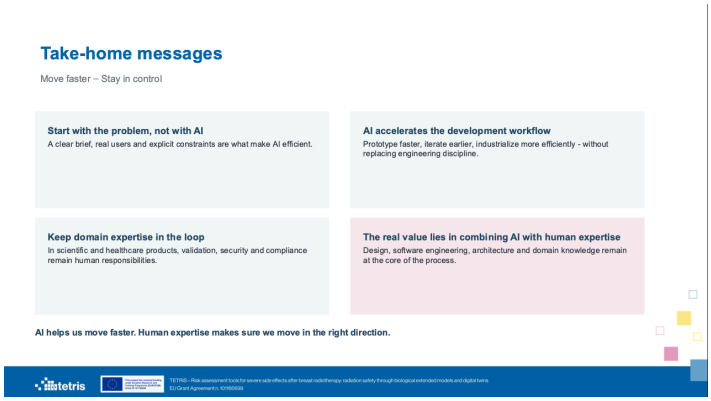
Advancing Medicine Through Imaging: 17 September, Trieste

Claudio Fiorino and Tiziana Rancati contributed to the *Physical Sciences in Medicine Workshop 2026*, hosted by the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste.

Their two-part lecture, *"Prospective Clinical Deployment of Imaging Biomarkers in RT – The Transition from Research to Clinical Practice"*, addressed an important challenge in personalised medicine: translating advances in quantitative imaging and predictive biomarkers into clinical applications

TETRIS EDUCATIONAL WEBINAR





The **5th Webinar** took place in September 25, entitled Exploring AI in Software Development:

'Product Development in 2026: From Concept to Delivery using AI'

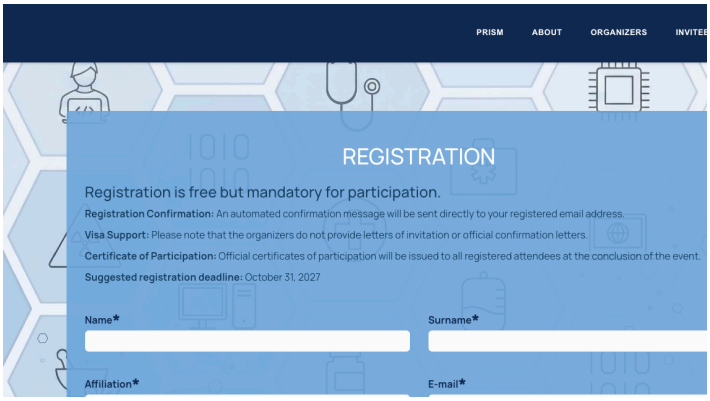
Starting with the questions *How does an idea become working software?* and *How is artificial intelligence changing the development process?*

Romain Cauhet and Oussama Radouche from AQUILAB by Coexya, made the partecipants explored the software development journey, from initial concept and methodology to programming, testing and delivery, highlighting how AI-powered tools can support different stages of the process.

Beyond the technologies themselves, the webinar offered an opportunity to reflect on how AI is transforming development workflows and the importance of human expertise in turning innovative ideas into reliable digital solutions.

To read the news, click here.

LOOKING AHEAD: NEW OPPORTUNITIES FOR COLLABORATION





PRISM – Digital Twins for Personalised Radiotherapy

Registrations are open for **PRISM – Digital Twins for Personalised Radiotherapy through Integrated Simulation and Modelling**, an international networking event taking place in Milan.

The event brought together researchers, clinicians, industry representatives, regulators and patient advocates to explore how Digital Twins can contribute to the future of personalised radiotherapy.

Several members of the TETRIS community contributed to the event's scientific and organisational activities, including **Paolo Zunino, Tiziana Rancati, Sara Gutiérrez-Enríquez and TETRIS Scientific Advisor Alfons Hoekstra**.

Link to the PRISM website here, registration are until 31 October 2026.

🔗 Discover PRISM and register.

Getting Ready for the 3rd TETRIS General Assembly

As September came to an end, the consortium was preparing to meet again in person for the **3rd TETRIS General Assembly**, taking place on **8-9 October 2026 at the Karolinska Comprehensive Cancer Centre in Stockholm**.

The meeting will provide an opportunity to review scientific progress across the Work Packages, exchange perspectives with our Scientific and Patient Advisory Boards, and discuss priorities for the next phase of the project.

After an intense quarter of research, reporting and preparation, we look forward to coming together to share achievements, strengthen collaboration and continue advancing towards our shared goal: **safer, more personalised breast cancer radiotherapy and improved long-term patient care**.

Stay connected with TETRIS…

Please forward this newsletter to your network and anyone who might be interested, and follow our latest news, scientific contributions and educational activities on our Project TETRIS Channels!

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