

PRESS RELEASE

AGIMUS: "Advancing AI and Robotics"

AGIMUS Integration week

From March 31st to April 3rd, AGIMUS' integration week was hosted by [PAL Robotics](#), to explore the integration of AGIMUS software into the TIAGo robot and to perform a performance benchmark of its robotic arm.



Figure 1. PAL's robots & TIAGO

Key achievements during the week:

1. The ROS interface and LFC implementation successfully passed initial testing. The first Model Predictive Control (MPC) run was completed on the robot, generating valuable datasets on motion and stiffness.
2. Promising directions have been identified to improve torque estimation, although further refinement is needed for the simulator and digital twin.

The next steps will focus on analyzing the collected data and defining a comprehensive evaluation protocol.



Figure 2: AGIMUS Integration week

6th AGIMUS Consortium Meeting

On April 2, 2025, during Integration Week, the AGIMUS consortium held its 6th project meeting at the PAL Robotics facilities. The meeting focused on advancing software development, testing activities, and preparing for industrial integration, while also reviewing major progress and planning future developments.



Figure 1: 6th AGIMUS project meeting

Some of the key highlights were:

- the development of novel low-complexity articulated-body algorithms for improved constraint handling in robotic applications.
- the finalization of Simple, a cutting-edge simulator supporting rigid and compliant contact interactions.
- the development of a new rendering engine optimized for robotics applications.
- major updates of [AGIMUS Software Libraries](#), including Pinocchio and Coal

Next Steps

- Continuation of preparations for the first industrial deployment
- Technical refinements and alignment with [pilot site](#) requirements
- Involvement of the [Industrial and Ethics Advisory Boards](#)

You may find more information about the project and keep up to date with its progress and developments by visiting the AGIMUS website (www.agimus-project.eu), where you may also subscribe to the AGIMUS newsletter. Additionally, you can follow AGIMUS' social media accounts on [LinkedIn](#), [Twitter](#), [Facebook](#), and [YouTube](#).