



INTRODUCING OUR ETPATHFINDER SMART SKILLS LAB EXPERTS

The ETPathfinder Smart Skills Lab connects local businesses with the technology experts of the project to share technological knowledge and skills. Our ET Technology Experts translate complex expertise into practical courses, business cases, workshops, and real-world applications. Discover how these experts can help you explore innovation opportunities in optics, vibration damping, automation, control technology, and vacuum techniques.



Aysun Caliskan en Norma A. Juárez Collazo

UC Leuven-Limburg

Background: Educational sciences

Expertise: The intersection of technology and education, with an emphasis on designing effective learning environments. A key research area examines how learners' perceptions influence the functionality and effectiveness of educational tools.

Industry contribution: We aim to translate complex scientific ideas into clear, actionable insights that meet industry needs. Our goal is to deepen our understanding of how learners interact with technology while advancing digital learning through innovative, scalable, and learner-centred solutions.



Fatima Zahra Raissouni

University of Antwerp

Background: Electrical and electronic engineering

Expertise: Intelligent electronic systems, optical measurement techniques, and communication technologies, with specific expertise in optical positioning and communication methods.

Industry contribution: I bring experience in experimental system development, technology validation, and engineering problem-solving. I enjoy translating research outcomes into practical solutions that address real-world industrial challenges.



Francesco De Marco

Ghent University

Background: Astronomy, astrophysics, and space science

Expertise: Optical experiments to reduce quantum noise in gravitational-wave detectors, advanced optical technologies, and the development of technologies for the Einstein Telescope.

Industry contribution: I provide essential training to participating companies and institutions and support industry partners by sharing expertise in optical technologies and precision experimental design. Through collaboration, I aim to strengthen innovation and contribute to the region's high-tech ecosystem.



Guido Alex Iandolo

Maastricht University

Background: Physics and theoretical physics

Expertise: Cryogenics, material physics, precision mechanics, cleanroom procedures, and the assembly and testing of ultra-high-vacuum-compatible systems.

Industry contribution: I provide practical insight into cleanroom operations and the assembly and testing of ultra-high-vacuum-compatible systems, combining hands-on experience with precision instrumentation and contamination-control procedures used in advanced research environments.





Michele Vacatello

NWO-I

Background: Physics

Expertise: Passive and active seismic isolation as well as the commissioning of suspension systems and control infrastructure.

Industry contribution: I bring expertise in seismic isolation, suspension systems, and precision control technologies. By sharing knowledge gained from commissioning advanced research infrastructures, I help industry partners strengthen their expertise and develop innovative solutions for high-tech applications.



Pooya Saffarieh

Eindhoven University of Technology

Background: Astroparticle physics

Expertise: Experimental physics, control engineering, and algorithmic control strategies, with a specialisation in modelling and commissioning high-precision opto-mechanical instruments.

Industry contribution: I support companies in the modelling, commissioning, and optimisation of high-precision opto-mechanical systems. This enables industry partners to improve the performance and precision of complex technological applications.



Rasa Jamshidi

Zuyd University of Applied Sciences

Background: Mechanical engineering and precision mechatronic systems

Expertise: Control technology, precision mechatronics, automation of vibration isolation systems, MIMO control systems, and technologies for gravitational-wave detectors.

Industry contribution: I have demonstrable experience in mechatronic systems and control engineering, including industrial automation, sensors and actuators for the manufacturing and process industries, and data acquisition. I also specialise in developing technologies for vibration mitigation.



Sjriek Alers

Fontys University of Applied Sciences

Background: Electrical engineering and embedded systems

Expertise: Robotics workstream, focusing on remote inspection and maintenance using robotic platforms in controlled scientific environments.

Industry contribution: I help industry partners by translating AI and perception technologies into deployable inspection and maintenance solutions. My hands-on experience with vision systems and robot control allows me to develop practical solutions for operational environments, such as cleanrooms and precision environments.



Tatevik Chalyan

Vrije Universiteit Brussel

Background: Physics

Expertise: Sensing technologies, ranging from biophotonics and integrated photonics to quantum optics for gravitational-wave detection, including the development of quantum squeezers and training modules in lasers, interferometry, optics, photonics, and cleanroom practices.

Industry contribution: I support industry partners through training in optics, photonics, and cleanroom practices while sharing expertise in advanced quantum technologies. By connecting research with practical applications, I help prepare companies for future challenges.