

Press Release

Software, AI, electrification and robotics: FEV presents innovations for mobility and new applications at Aachen Automotive Colloquium

Media Contact
Marius Strasdat
T +49 241 5678-6452
strasdat@fev.com



Aachen, Germany, September 2026 – From October 5 to 7, 2026, the Aachen Automotive Colloquium will celebrate its 35th edition. FEV will showcase the latest technological developments and engineering expertise in software and AI, electrification, and humanoid robotics.

At the same time, the company will demonstrate how these capabilities can be transferred to new application areas – from mobility and aerospace to safety-critical and defense-related systems. The exhibition will be complemented by several expert presentations.

Software and AI for the development of tomorrow

FEV.io, the software division of FEV, offers a digital-twin platform that digitally maps entire fleets and individual vehicles down to the component and subcomponent level. It combines live operational and condition data with AI-powered analytics such as predictive maintenance, route optimization and efficiency assessments. Different functions can be integrated according to specific requirements, providing the basis for increased vehicle availability

and utilization, lower fuel and energy consumption, and reduced operating costs. Its scalable, modular architecture enables deployment across different fleets and operating environments. In addition, the global engineering and innovation partner headquartered in Aachen will present GenAISys, a multi-objective AI platform for application-oriented virtual development of BEV concepts.

New technologies for electrification

In the field of electrification, FEV will showcase a battery module developed in cooperation with ProLogium. It combines solid-state battery technology with expertise in module design, thermal management, safety and vehicle integration. Other highlights include a latest-generation EDU with a SiC-based traction inverter and an electric machine featuring an amorphous steel stator core and magnets free of heavy rare earth elements.

With Aero Alpha, FEV is also transferring electrification concepts to aviation. The sustainable aircraft concept combines a fuel cell, electric propulsion and battery technology with new approaches to aircraft structure and cabin design.

Experience humanoid robotics firsthand

The FEVBot brings FEV's activities in humanoid robotics to life at the exhibition stand. The robot moves autonomously, interacts with visitors, presents exhibits and answers questions. A disassembled Unitree actuator will also demonstrate how FEV analyzes and benchmarks the hardware and cost structures of robotic components.

Engineering for new application areas

In addition to Aero Alpha, FEV will demonstrate how its expertise extends beyond traditional mobility applications with an autonomous underwater drone demonstrator for safety-critical and defense-related applications. Key areas include systems engineering, trustworthy AI, functional safety, cybersecurity, as well as verification and validation. This enables FEV to combine technological development with the stringent requirements for safety, reliability and traceability of autonomous systems.

In the commercial vehicle sector, FEV will also showcase its expertise in the development and integration of exterior cab components using exhibits from the Mercedes-Benz eActros.

FEV will further present an innovative cylinder head for heavy-duty hydrogen engines. Its novel cooling concept enables highly targeted temperature management of thermally highly loaded areas within the cylinder head, particularly around the spark plug and direct injector. Finely structured channels positioned close to these hotspots ensure efficient heat dissipation. At the same time, this precise flow guidance increases the stiffness of the cylinder head and enables the use of aluminum also for H₂ heavy-duty applications.

Technology expertise on the conference program

The conference program also reflects the technological breadth of FEV. The company's presentations cover topics ranging from AI-supported virtual development of BEV concepts and data-driven CAE workflows to a permanent-magnet synchronous machine with an amorphous core and magnets free of heavy rare earth

elements, as well as human-centered R&D organizations supported by AI. Another presentation will focus on the analysis of a lithium-metal battery cell for eVTOL applications.

With its exhibits, demonstrators and expert presentations, FEV will demonstrate how technological expertise developed in the mobility sector can be transferred to new applications and markets.

For the first time, the Aachen Automotive Colloquium will take place at Kurhaus Aachen. FEV will be exhibiting at Stand 9. The full agenda and registration for the 35th Aachen Automotive Colloquium are available [here](#).

Footage



Caption: At the Aachen Automotive Colloquium, FEV demonstrates how its technological expertise can be transferred to new application areas – from mobility and aerospace to safety-critical and defense-related systems. The exhibition is complemented by a series of expert presentations. Source: FEV.

About FEV

FEV has always pushed the limits.

FEV is a globally leading engineering provider in the automotive industry and internationally recognized leader of innovation across different sectors and industries. Professor Franz Pischinger laid the foundations by combining his background in academia and engineering with a great vision for continual progress. The company has supplied solutions and strategy consulting to the world's largest automotive OEMs and has supported customers through the entire transportation and mobility ecosystem.

As the world continues to evolve, so does FEV.

That's why FEV is unleashing its technological and strategic expertise into other areas, applying its forward thinking to the aerospace and energy sectors. Thanks to its software and system expertise, the company also leads the way making intelligent solutions available to everyone. FEV brings together the brightest minds from different backgrounds and specialties to find new solutions for both current and future challenges.

But FEV won't stop there.

Looking ahead, FEV continues to push the limits of innovation. With its highly qualified 5,600 employees at more than 45 locations globally, FEV imagines solutions that don't just meet today's needs but tomorrow's. Ultimately, FEV keeps evolving – to a better, cleaner future built on sustainable mobility, energy and software that drives everything. For the company's partners, its people and the world. **#FeelEVolution**