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Nota di contenuto	Challenges and Opportunities of Sustainability in Tire Industry -- Is Micro Mobility the Path Toward Corner Modules -- EDAG CityBot Chassis and Vehicle Dynamics Control of a Multifunctional, Autonomous Robot Vehicle -- Shaping the future steering wheel Evaluation of current trends in steering wheel rim design -- A method of tire and vehicle model validation for virtual ESC homologation -- An iterative test case sampling method to identify critical limits of ADAS/ADS in simulation -- Comparison of the perception of damaged rear axle tie rods in the real vehicle and in the dynamic driving simulator based on subjective and physiological data -- Optimization of the Comparability Between Road Testing and the Handling Roadway Test System -- A Generic Model Predictive Vehicle Dynamics Controller for Simulation -- Integrated motion control strategy for an over-actuated by-wire vehicle -- Rotary Height Sensor Load Detection Correction Algorithm -- Enhancing the real-time connection between driver, vehicle, & road -- Virtual Chassis Development Reaching for Optimized Trade-off between Safety and Comfort -- Front loading the vehicle dynamics development via parametric modeling of axle elastokinematics -- Automated Methods for the suspension pre-development Design of a front axle for a long range electric vehicle -- Target setting of Driving Performance index for Module-based Architecture development of Product family -- Basic safety guidelines for Steer-by-Wire for a new

DIN standard -- Evaluation of requirements for safety mechanisms and E/E architecture in SbW steering systems with fault injection techniques -- Evaluation methodology of normal driver's controllability performance challenged with expert-defined steering faults injected in steer-by-wire systems -- Steer-by-Wire self-steering behavior in the context of hands-off situations -- Digital Development of a Robust Steer-by-Wire System -- Driving simulator study on acceptance of a Steer-by-Wire steering system during braking on curve split -- Study on information about road surface and vehicle behavior provided by steer-by-wire -- Enabling the capabilities of Hardware in the Loop for steering feel characterization on a dynamic simulator -- Cooperative Control Concept for the Handwheel Actuator of a Steer-by-Wire System.

Sommario/riassunto

Sustainability, electromobility, and automation in the transport sector: These megatrends are having a major impact on the overall chassis system. How exactly was discussed at chassis.tech plus 2023. "The chassis system faces numerous challenges." - with these words, Professor Dr. Peter E. Pfeffer, Munich University of Applied Sciences, has opened chassis.tech plus 2023. These include automated driving, connectivity and, as a particularly major challenge, sustainability, said the symposium's scientific director. More than 400 participants from 20 countries gathered for the 14th International Munich Chassis Symposium. Key topics at chassis.tech plus 2023 included customized and innovative chassis, integrated chassis systems, smart steering, modern braking systems and reliable wheel-tire components. The second day of the event was concluded by keynotes from Thomas Sprengel (Porsche Engineering Services) on "Chassis development in China - overview and trends" and from Victor Underberg (Lamborghini) on "Lamborghini sports cars: evolution from ICE to PHEV". The 14th International Munich Chassis Symposium has taken place as a hybrid event on June 20 and 21, 2023 - in Munich and with a parallel livestream. Participants were able to use the four specialist sections to exchange information on the latest developments relating to chassis, steering, brakes, tires and wheels. Contents Chassis and Steering Tech: Sensor Systems - Steer-by wire: Safety and Controllability - Suspension - Development Processes and Methods Target audiences Automotive engineers and chassis specialists as well as students looking for state-of-the-art information regarding their field of activity. Lecturers and instructors at universities and universities of applied sciences with the main subject of automotive engineering. Experts, researchers and development engineers of the automotive and the supplying industry. Publisher ATZ live stands for top quality and a high level of specialist information and is part of Springer Nature, one of the leading publishing groups worldwide for scientific, educational and specialist literature. Partner TÜV SÜD is an international leading technical service organisation catering to the industry, mobility and certification segment.
