

PRESENTATIONS

Wednesday, september 14, 2022

SIMULATION METHODS (1)

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	Simulator-based development of a stability assistant for wheeled excavators <i>Pause¹; Emmerich²; Steidel²; Reinhard²; Kleer²; Kleeberg²; Weber¹; Zenner¹ (¹Volvo Construction Equipment; ²Fraunhofer ITWM)</i>
10:45	Vorstellung eines kompakten Fahrsimulators für flexible Forschungsanwendungen <i>Ranker; Chada; Kunz; Mahjoub; Teutsch; Görges; Ebert (TU Kaiserslautern)</i>
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12:25	A Novel Approach to Classify and Replicate Human Drivers using Model Predictive Control <i>Sundaram; Chada; Görges (TU Kaiserslautern)</i>
	Emission Control with Co-optimization of Connected Vehicle Technology and Energy Management Strategies of Electric Hybrid Vehicles <i>Tayade; Schotten (TU Kaiserslautern)</i>

ASSISTED AND AUTOMATED DRIVING AND WORKING

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	Low-latency Probabilistic Collision Detection Method for C-V2X Applications <i>Yachikojima¹; Arakawa¹; Kitahara²; Ogino²; Hasegawa³; Murata¹ (¹Osaka University; ²KDDI Research, Inc.; ³Tohoku University; Japan)</i>
14.10	Towards a probabilistic situation prediction model for pedestrian behaviors to enable safe and performant autonomous shuttle operation in pedestrian zones <i>Reich¹; Wellstein¹; Jan²; Wolf²; Berns² (¹Fraunhofer IESE; ²TU Kaiserslautern)</i>
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15.50	SINADRA meets REACTiON: Combining dynamic risk management and behavior-based robotics for robust and safe navigation in pedestrian zones <i>Wolf¹; Jan¹; Berns¹; Wellstein²; Groß²; Reich² (¹TU Kaiserslautern; ²Fraunhofer IESE)</i>
	Transferring off-road control concepts to watercraft used in flooded areas <i>Meckel; Keen; Berns (TU Kaiserslautern)</i>

INNOVATIVE DEVELOPMENT AND PRODUCTION METHODS (1)

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	Hybrides Systemintegrations-Konzept auf Basis Digitaler Zwillinge smarterer Produkt-basierender System of Systems und Mixed Reality Methoden <i>Ehemann; Forte; Wiegand; Göbel (TU Kaiserslautern)</i>
14.10	Modellbasierter und kostenoptimierender Systementwurf von elektrischen, radnahen Antriebssystemen im Nutzfahrzeugbereich <i>Menn (BPW Bergische Achsen KG)</i>
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15.50	Concept ELV² - Entwicklung einer elektrischen Antriebsachse für den schweren Verteilerverkehr <i>Uerlich (RWTH Aachen)</i>
	Die Transformation rollt voran – von der konventionellen zur elektrischen Achse <i>Lehmann (Daimler AG)</i>

SAFETY, RELIABILITY AND DURABILITY (1)

room
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16:35	A prediction model for exhaust gas regeneration (EGR) clogging using offline and online machine learning <i>Kumar^{1,2}; Cramsky^{1,2}; Löwe²; Danielsson¹ (¹Volvo CE, Sweden; ²Linnaeus University, Växjö, Sweden)</i>
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17:50	Electrically induced damage of rolling bearings due to parasitic converter currents in electrical drive trains <i>Graf; Capan; Sauer (TU Kaiserslautern)</i>
	Framework for systematic engineering of runtime safety models for dynamic assurance <i>Schneider; Velasco (Fraunhofer IESE)</i>