

Einladung zu einem Promotionsvortrag

Vortragender:	Razieh Balouchi Anaraki, M. Sc.
Thema:	Enhancing Situational Awareness in Low-Voltage Grids through Digital Process Twins and Data-Driven Methods
Inhalt:	The low-voltage power grid is undergoing major transformations due to the integration of renewable energy sources and the rise of new loads such as electric vehicles, heat pumps, and smart home systems. These developments increase complexity and variability, challenging conventional grid management. Consequently, digitalization is becoming essential, especially in low-voltage grids, to enable timely and informed decision-making for distribution system operators. Digital process twins have emerged as a promising solution, offering real-time simulation and analysis of grid operations. By integrating real-time data and artificial intelligence, they help visualize grid behavior, predict issues, and enhance stability and reliability. The focus is on enhancing situational awareness in low-voltage grids through the use of digital process twins. Through data-driven methods, the approach enables forecasting of critical scenarios and anomaly detection, capabilities vital for managing renewable energy variability and adapting to new consumer behaviors.
Termin:	26.01.2026, 16:00
Ort:	Martin-Schmeißer-Weg 12, Raum 2.7, 44227 Dortmund
	Zoom: Click here
Vortragsleitung:	Prof. Dr. -Ing. Christian Rehtanz

bei Rückfragen wenden Sie sich an das
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