

APARM Special Session X

Special Session Basic Information:

Session Title	Frontiers in Dynamics Modelling and Reliability Assessment of Advanced Equipment
Introduction and topics	
<p>This sub-forum focuses on frontiers in dynamics modelling and reliability assessment for advanced equipment like aero-engines and high-speed trains. It explores the integration of multi-physics modelling with data-driven and AI techniques to address core challenges in safety and longevity. Key topics include nonlinear dynamics, uncertainty quantification, and reliability assessment, aiming to bridge theoretical advances with engineering practice for advanced equipment.</p>	

Special Session Chair(s):

	Name	Hua-Ming Qian
	Prefix	Assoc. Prof.
	Department	Center for System Reliability and Safety
	Organization	University of Electronic Science and Technology of China
	City/Region	Chengdu/China

Organizer's Brief Biography

Hua-Ming Qian is an associate professor at the Center for System Reliability and Safety, University of Electronic Science and Technology of China. He is also a member of the reliability committee of Chinese Mechanical Engineering Society. Up to now, he has published over 20 papers on dynamic modeling, life prediction, structural reliability analysis and optimization, etc.

	Name	Ying Zeng
	Prefix	Assistant Researcher
	Department	Center for System Reliability and Safety
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Organizer's Brief Biography

Ying Zeng is an assistant researcher at the Center for System Reliability and Safety, University of Electronic Science and Technology of China. Up to now, he has published over 20 papers on reliability modeling, RUL prediction, and fault diagnosis of electronic products and micromechanical systems.