



ARTISTE2025

14-17 September 2025 – Politecnico di Torino, Turin, Italy
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Special Session Title:

AI-driven Transport Infrastructure Management: future of next smarter bridges and tunnels

Organizers

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Abstract

Artificial Intelligence (AI) is transforming how we manage critical transport infrastructures (bridges, tunnels, and highways) enhancing safety, efficiency, and cost-effectiveness. This special session brings together researchers, engineers, and transport network operators to explore cutting-edge AI applications in infrastructure monitoring, predictive maintenance, and risk assessment. Whether you're an academic pushing the boundaries of AI or a practitioner managing transport networks, this session will provide actionable insights to future-proof infrastructure management. Join us to discuss how AI can set new standards, before the competition does!

Contents of interest include, but are not limited to, the following topics:

- AI-powered predictive maintenance – Reducing downtime and extending asset lifespan.
- Real-time structural health monitoring – Using sensors and machine learning for early defect detection.
- Data-driven decision-making – Optimizing inspections and resource allocation for operators.
- Case studies from industry leaders – How concessionaires and infrastructure owners are already benefiting from AI.

This Special Session is technically sponsored by **Nemesis Ingegneria Srl**



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