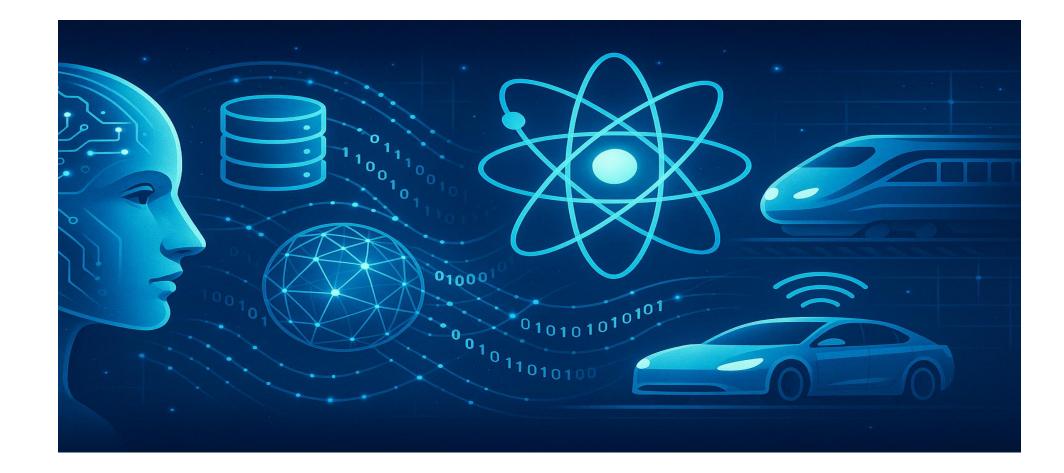
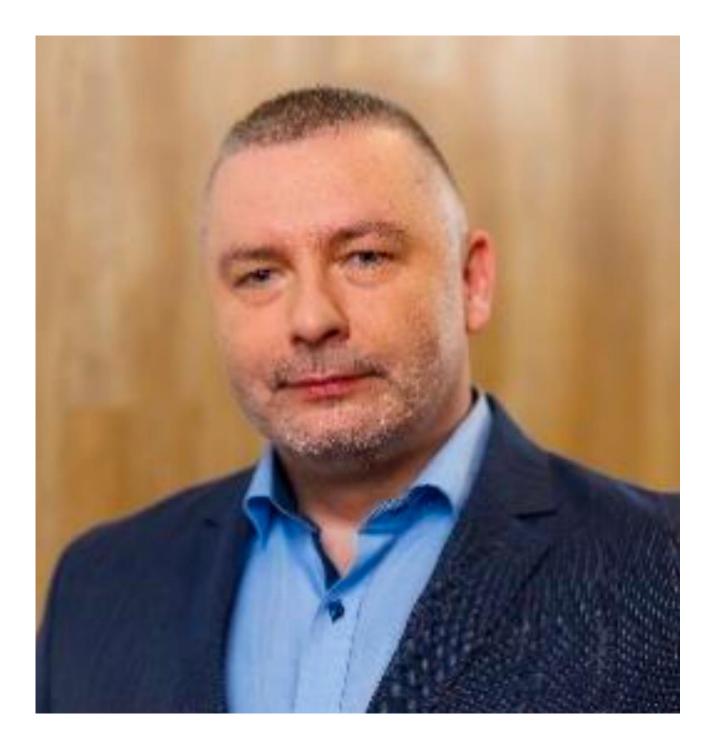
## FRIDAY JULY 4 11AM-12PM

# TRANSPORTATION SEMINAR



# Location: E2-2350



### Dr. Rafal Burdzik

#### Professor

Faculty of Transport and Aviation

**Engineering at Silesian** 

## Al and Quantum Physics Era - the Importance of Information in Scientific Research on Transportation

In this Talk, Dr. Burdzik will explore how emerging technologies particularly artificial intelligence and quantum computing—are transforming scientific research. Reflecting on over a century of scientific breakthroughs, from Einstein's *Annus Mirabilis* to the foundations of quantum mechanics, he will highlight how onceradical ideas have reshaped our understanding of the world. In today's era, the convergence of AI and quantum physics is accelerating change at an unprecedented pace, creating both opportunities and challenges in how we collect and interpret research data. This seminar addresses the evolving role of information in transportation research and emphasizes the need for scientists to adapt measurement methodologies to keep pace with technological advancements. With curiosity and critical thinking, Dr. Burdzik encourages us to embrace the 'new'—from space telescopes to supercomputers—while continuously reevaluating our

University of Technology, Poland Linkedin Page:

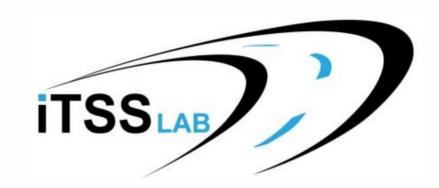




existing knowledge systems.

#### Speaker

**Dr. Rafał Burdzik** is a professor at the Faculty of Transport and Aviation Engineering, Silesian University of Technology, Poland, and a visiting lecturer at several European universities. With over twenty years of transport research experience, he has authored or coauthored books and more than 450 scientific papers. He serves as editor-in-chief and editorial board member for several top journals and is active in numerous scientific associations and committees. He has led many innovative and applied research projects with industry partners and is a recognized international expert in transport, mechanical engineering, vibroacoustics, machine diagnostics, transport safety, and environmental issues.



Visit our website at: https://www.civil.uwaterloo.ca/itss/index.htm