

# MT-ITS 2019 Special Event, Panel Session

ITS IN PRACTICE: THEORY AND RESEARCH MEETING INDUSTRY AND CLIENTS.



*under Honorary Patronage of Jacek Majchrowski Mayor of the City of Kraków  
chaired by prof. Francesco Viti, University of Luxembourg*

6 June 2019, 09:00 – 10:30 am, Cracow University of Technology

---

Session will group 6 panelists chaired by experienced researcher with significant international contribution to ITS field (prof. Francesco Viti, Luxembourg) who, invited to discuss members of two success stories of Polish ITS, namely Kraków (Łukasz Gryga, City of Kraków) and TRISTAR (dr. Jacek Oskarbski, Politechnika Gdańska), conference co-chair Andrzej Szarata (Cracow University of Technology), backed up by two key players on the polish ITS market, PTV represented by co-founder of PTV SISTeMA Lorenzo Meschini and scientific software developer at Aimsun Josep Perarnau.

Number of polish cities benefited from EU supported implementation of ITS systems in the last decade. Starting from hardware infrastructure in small cities to complex innovative systems in big agglomerations. Rapid development was both opportunity and challenge. This resulted in rich experiences. Starting with tailored solutions defined by local experienced experts, through successful off-the-shelf implementations, up to failed attempts to copy and paste legacy systems. In this session we want to sit and openly discuss.

In this setting we will open discussion and try to answer:

1. Are the systems doing their job?
2. What is the real benefit in the systems?
3. Is the human/expert factor evitable and can we rely on artificial intelligence of ITS?
4. Are the researchers behind or in front of industry?
5. Do we want good models or big data is enough?
6. What is the real challenge of the near future and the far future?

*Looking forward to see you there*

*Conference Chair  
Rafał Kucharski*



**Francesco Viti**  
University of Luxembourg

is Associate Professor at the University of Luxembourg since 2012. He obtained his PhD at the TU Delft and then he was associate researcher at KU Leuven, both top universities in the transport and mobility field. He is the head of the MobiLab Transport Research Group within the Engineering Unit. His research activities range from mobility analysis, development of decision support systems for travellers and for transport operators, Intelligent Transport Systems and network modelling and control. Having a strong interdisciplinary vision, combining engineering, computer science and social sciences, his team has well-established collaborations with different groups within the University of Luxembourg, as well as with international academic and industrial partners. He is author of about 60 publications indexed by Scopus, and more than 150 conference papers. He is reviewer of most of the top journals in the transportation domain, and is associate editor of Journal of ITS and Transportation Research Part C. Since 2008 he acts as External Expert for the European Commission.



**Andrzej Szarata**  
Cracow University of Technology

Head of Department of Transportation Systems at Cracow University of Technology, Dean of Civil Engineering Faculty. Pioneer of Polish strategic demand modelling, author of most of local urban transport models, many of which used to evaluate and verify ITS systems. His rich consulting experience was used in implementing Krakow management and control systems.



**Lorenzo Meschini**  
PTV SISTeMA

A PhD in Transportation Engineering, has a strong scientific and technical experience in the field of simulation, analysis, planning and management of transport systems. An expert programmer, he has managed many international projects in the field of Intelligent Transport Systems (ITS) and Transport Planning. He has authored many publications in national and international scientific literature, and has addressed many international conferences. He is co-founder and CEO of PTV SISTeMA, Spin-off of the University "La Sapienza" and a PTV Group company. For PTV Group he covers the role of Real-time solutions Director.



**Łukasz Borowski**  
Siemens

a graduate of the Warsaw University of Technology at the Faculty of Transport with a specialty in traffic control. For 15 years associated with the ITS industry. In 2006, he joined Siemens where he currently serves as Site Manager and Traffic Engineering at Siemens Mobility. He participated in the implementation and implementation of integrated traffic management systems in many cities in Poland - including Rzeszów, Warsaw, Krakow, Poznan and Białystok. He was also responsible for the implementation of projects related to management and traffic control in tunnels and expressways in Poland.

## PANELISTS

### MT-ITS 2019 Special Event, Panel Session

ITS IN PRACTICE: THEORY  
AND RESEARCH MEETING  
INDUSTRY AND CLIENTS.



**Josep Perarnau**  
Siemens Aimsun

has 16 years of experience in scientific software development, principally in the field of simulation and optimization. Josep is the principal developer of the Aimsun Next mesoscopic simulator and also contributes to the development of Aimsun Next dynamic traffic assignment and Aimsun Live models. Josep's experience includes deep knowledge of programming languages such as C, C++, and Python, and mathematical languages like R and Matlab. Josep has participated in a number of Spanish and European projects and has co-authored many papers in peer-reviewed journals and transportation engineering conferences. His areas of research include traffic modeling, simulation and forecasting techniques for online and offline transportation problems. In addition to Aimsun, since 2002 Josep has taught degree-level Computer Science at the Open University of Catania. His tuition topics include computability theory, complexity theory and algorithms to resolve NP-hard problems, and graph theory.



**Jacek Oskarbski**  
Gdansk University of Technology

Assistant professor (Ph.D.Eng.) in the Faculty of Civil and Environmental Engineering at Gdansk University of Technology. His main research areas are: traffic modeling and forecasting, Intelligent Transport Systems, traffic engineering and mobility management. He worked as road planner in BPBK and Transprojekt Gdański Office (1993-1996). He has started working at Gdansk University of Technology in 1996. He has been also head of Traffic Engineering Department in the City of Gdynia for 7 years (2004-2011) and head of Transport Engineering Department in Road and Green Areas Management in Gdynia since 2012. He was a member of the board of the Association of Intelligent Transport Systems, "ITS Poland" (2007 – 2015). Researcher in many national and international projects i.e. CIVITAS DYN@MO, ZEUS, FLOW, BUSTRIP, RID 4D "Impact of the use of Intelligent Transport Systems services on the level of road safety



**Łukasz Gryba**  
City of Kraków

Director of the Municipal Traffic Engineer Department in Krakow (Wydział Miejskiego Inżyniera Ruchu Urzędu Miasta Krakowa). Previously for over 10 years worked in Krakow Road Administration and was responsible for traffic lights control and ITS Systems implementation, development and configuration. A graduate of the AGH University of Science and Technology in the field of Electronics and Telecommunications and Postgraduate Studies in Traffic Engineering at the Cracow University of Technology. Since 2013 chief specialist in Traffic Engineering Department of Municipal Road Authority. He has extensive experience in configuration of traffic light controllers and ITS Systems including public transport priority, dynamic passenger information, variable message signs, road traffic detectors and CCTV cameras. He was involved in a process of implementing and developing of Krakow ITS since the beginning of its operation. In 2014 member of a team that was involved in modernization and work coordination of Traffic Control Center (Centrum Sterowania Ruchem) in Krakow. Since the beginning of 2019 a director of the Municipal Traffic Engineer Department in Krakow which is responsible for road traffic management including supervision and configuration of Urban Traffic Control System in Krakow.