

A CZECH-LUXEMBOURGISH ROBOTICS DAY
PROGRAM
May 14, 2019, 9.00-17.00h, Czech Embassy, Luxembourg

08:30-9:00 Registration, Coffee



09:00-9:05 Welcoming Address by H. E. Mr. Petr Kubernát, Ambassador of the Czech Republic



09:05-10:30 ***Session 1: Industrial Robotics***

- Vladimír Mařík, CIIRC CTU Scientific Director, Czech National Innovation Strategy and Czech Institute of Informatics, Robotics, and Cybernetics

Robotic Innovation and Know-how Transfer

- Karel Zimmermann, Faculty of Electrical Engineering, CTU

Overcoming New Challenges and developing Term Cooperation with Industrial Partners

- Martin Švejda, Ondřej Severa, NTIS, Pilsen West-Bohemian University

Research and development of Non-standard Robots. How to meet the need for special Industrial Applications. A Video Demonstration of a Prototype

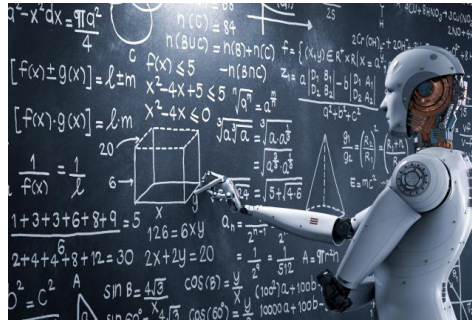
- Václav Krys, Faculty of Mechanical Engineering, VŠB Ostrava Technical University

Robotics and Mechatronics. Research Cooperation in between research groups and industry: Key Infrastructure and Equipment needed

- Peter Plapper, Full Professor in Engineering Science, University of Luxembourg

Industrial Robotics and industry 4.0

Q and A



10:30-10:45 Coffee Break

10:45-12:15 **Session 2: Mobile and Field Robotics**

- Libor Přeučil, Head, Mobile Robotics Group, CIIRC CTU, Intelligent and Mobile Robotics Research, AI-based autonomy in Robotic Applications

Autonomous and Mobile robotics. How to navigate and interact in Conditions of Uncertainty, without Support Infrastructure. Illustrative industrial applications

- Miroslav Kulich, CIIRC CTU, Advanced Methods for Hard Planning Problems in Mobile Robotics

Planning and Routing. Overcoming the major problems related to Robotic Tasks. Methodology for providing Near-Optimal Solutions for Real-World Deployment

- Luděk Žalud, Robotics and AI Group, CEITEC University of Technology; VUT Brno, Field Robotics

Robots outside the Laboratory. Autonomous Telepresence Robotic System. Autonomous Search for Gamma-Radiation Sources and Robotic Platforms Orpheus and Morpheus

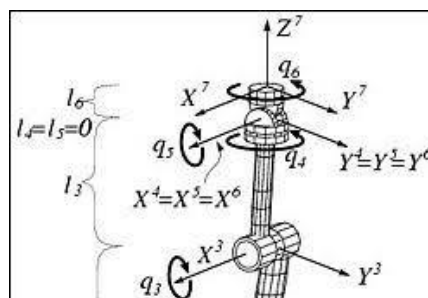
- Bob Lamboray, Policy Officer, SpaceResources.lu, Luxembourg Space Agency

The Space Resources Value Chain and the Role of Robotics and Autonomous Systems

- Holger Voos, Automation & Robotics Research Group, SnT/University of Luxembourg

Mobile Robotics Research, SnT/University of Luxembourg

Q and A



12:15-13:30 Luncheon



13:30-14:45 **Session 3: Machine Perception and Video Analysis**

- Václav Hlaváč, Head, Intelligent Robotics Department, CIIRC CTU, Machine Perception Supported Robotics

New frontiers in Robotics. Manipulating Soft Objects, such as Clothing. Humans and Robots working together: Perception and Decision Making. Case study of a Disaster Scene Inspection after the Amatrice Earthquake in Italy. Autonomously Driven Cars

- Jaromír Tejkl, Director, CertiCon, a.s., CertiConVis Real-time Video Analysis

Neural Network-based Software. Use of real time Video Analysis in Public Safety, Behavioral Statistics and Parking for Smart City Projects. Certicon's Development Services in Medical, Automotive and Embedded Areas.

- Georgios Varisteas, SnT/University of Luxembourg

Evaluation of End-To-End Learning for Autonomous Driving

Q and A

14:45-15:00 Closing Remarks, Annotations and Contacts Distribution

15:00-15:45 Family Photo. Drinks. B2B Meetings. End of the Proceedings



16:00-17:00 Optional Guided Visit to the Robotics Department, University of Luxembourg