Artificial Intelligence (AI) leverages computers and machines to mimic the problem-solving and decision-making capabilities of the human mind. What we have today are systems that are trained and focused to perform specific tasks, such as playing chess, recognizing a deer crossing a road or a stop sign.

Automotive Artificial Intelligence (AAI) is a term that has different meanings, depending upon who is using it. For some, it means completely removing the human from the driving task and turning over control of the vehicle to software and sensors. For others, the goal of **AAI** is to supplement and improve the human driver's abilities in order to make driving safer, offer new and better services, and increase the effectiveness of transport management. The latter goal, improving the driving experience, has proven achievable with **AI** that accomplishes one or a limited set of objectives. The former goal, removing the human from the driving task, has proven to be devilishly difficult because the car needs to drive at least as well as a human.

This panel will present and discuss views on the current status of **Automotive Artificial Intelligence** and the different scenarios and timelines for the implementation.

Our objectives for this session are:

- For those attending who will work on policies and standards related to driverless vehicles, to further your understanding of the issues these automotive AI-based applications raise over and above driver assistance systems that do not use AI, including data privacy, liability, and the development of effective standards.

- For those attending who will develop solutions for highly automated and driverless vehicles, to further your appreciation of how automotive AI-based applications will interact with humans, including drivers, passengers and people outside the vehicles.

- Finally, to attempt to identify the factors that are standing in the way of wide-spread adoption of automotive AI

Session Two: AI Applied to Vehicle Safety, Services and Transport Management

Participants

Missy Cummings, Ph.D.

Keynote Speaker

George Mason University

Bryn Balcombe

Oxbotica

Michael L. Sena

Moderator

Consultant in Connected Vehicles and Editor of THE DISPATCHER

Junichi Hirose

Japan Highway Industry Development Org.

Jenny Lundahl

RISE Research Institutes of Sweden

Jan Lühmann

Vice Chairman of the OICA Technical Committee

Participants

Missy Cummings – *Missy is a Professor in the George Mason University Mechanical, Electrical and Computer Enginnering and Computer Science departments. She is an American Institute of Aeronautics and Astronautics (AIAA) Fellowa former U.S. Navy officer and military pilot, and recently served as the senior safety advisor to the U.S. National Highway Traffic Safety Administration. Her research interests include the application of artificial intelligence in safety-critical systems, assured autonomy, human systems engineering, and the ethical and social impacts of technology.*

Bryn Balcombe – *Bryn is Autonomy Systems and Regulatory Expert at Oxbotica. He is the founder of the Autonomous Drivers Alliance and previously served as Chief Strategy Officer for Roborace, a motorsport competition for human and AI drivers. He is the Chairman of the ITU-T Focus Group on AI for Autonomous and Assisted Driving (FG-AI4AD).*

Junichi Hirose – *Junichi is a Principal International Research Fellow and Senior Researcher at ITS CREATE Division of HIDO, the Japan Highway Industry Development Organization. He has been working on creating several international standards in the area of ITS within ISO/TC204 since 2003. Currently he is the Convenor of ISO/TC268/Subcommittee 2/Working Group 2 – international standards for sustainable cities and communities, sustainable mobility, and transportation.*

Jenny Lundahl – *Jenny is a senior researcher and legal expert at RISE Research Institutes of Sweden in the Mobility in Transformation Unit. She works with many issues related to policy and regulatory innovation for mobility and systems where AI applications for vehicles and transport systems is one part.*

Jan Lühmann – *Jan is the Regulatory Affairs Coordinator for automated driving at Volkswagen and is Vice Chairman of the International Association of Automobile Manufacturers Technical Committee. Since 2020, he represents the international automotive industry in the areas of ITS, AI, data and vehicle communications within the UNECE.*

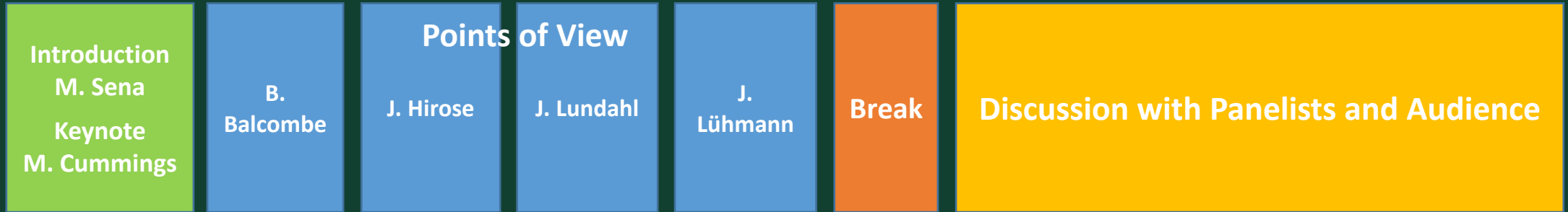**Michael L. Sena –** *Moderator -Consultant in Connected Vehicles and Editor of* The Dispatcher