



Technische
Universität
Braunschweig



SE²A Sustainable and
Energy-Efficient Aviation
Cluster of Excellence

SYMPOSIUM

27th to 28th October 2020

Programme: Tuesday October 27, 2020

Cluster of Excellence Symposium –
Sustainable and Energy-Efficient Aviation SE²A

Session 1: Aircraft Design

Session Chair: Prof. Dr. Peter Horst

09:00-09:10	Prof. Dr.-Ing. Jens Friedrichs TU Braunschweig	Welcome and Introduction
09:10-09:50	Dr. Johannes Hartmann Deutsches Zentrum für Luft-und Raumfahrt (DLR)	Decision Making on Aircraft Concepts & Technologies for Climate Neutral Flight
09:50-10:30	Prof. Dr.-Ing Ali Elham TU Braunschweig	Error or Breakthrough?
10:30-11:10	Prof. Dr. rer. nat. Kai Leonhard RWTH Aachen University	Molecular design of processes and fuels
11:10-11:50	Prof. Dr.-Ing. Regine Mallwitz TU Braunschweig	Challenges in electrifying aircrafts
11:50-12:30	Dr. Roelof Vos Delft University of Technology	The Flying-V - a design for a highly energy-efficient long-distance aeroplane

12:30 – 13:30 Break

13:30-14:10	Uta Maria Pfeiffer Bundesverband der Deutschen Luftverkehrswirtschaft (BDL)	Green Deal and Corona: What is the way forward for climate protection in aviation?
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Session 2: Technological Requirements / Technology Assessment

Session Chair: Prof. Dr. Jörg Seume

14:10-14:50	Prof. Dr. Zoltan Spakovszky Massachusetts Institute of Technology (MIT)	Advanced Aero-Engine Propulsion: Challenges & Opportunities
14:50-15:30	Julian Hölzen, M.Sc. Leibniz Universität Hannover (LUH)	Hydrogen-Powered Aviation - A Path to Zero Carbon Flying
15:30-16:10	Dr.-Ing. Lothar Bertsch Deutsches Zentrum für Luft- und Raumfahrt (DLR)	Aircraft System Noise Assessment within the SE ² A - overview and status quo
16:10-16:50	Prof. Dr.-Ing. Christoph Herrmann TU Braunschweig	Towards a more sustainable aviation through Integrated Computational Life Cycle Engineering

17:00 End of Symposium