

Eighth episode of the science podcast "exzellent erklärt" now online

Start Time: Friday, March 4, 2022

End Time:



Prof. Jens Friedrichs and Prof. Rolf Radespiel from the [Cluster of Excellence SE²A](#) in Braunschweig have an ambitious goal: by 2050, aircrafts should be flying sustainably. This means that they will then no longer fly with fossil paraffin, but with either electric power, hydrogen or synthetic paraffin. These new-generation aircrafts will no longer have much in common with aircraft as we know them.

The Cluster of Excellence SE²A - "Sustainable and Energy Efficient Aviation" (EXC 2163) is an interdisciplinary research project with the aim of exploring technologies for the sustainable and environmentally compatible development of air transport. In the cluster, scientists from the fields of aviation, electrical engineering, energy, chemistry and design are working on the reduction of emissions, the reduction of noise pollution, the recyclability of air transport systems and the further development of air traffic management.

[Prof. Rolf Radespiel](#) has been heading the [Institute of Fluid Mechanics](#) at TU Braunschweig since 2000. His research focuses on experimental and numerical methods for aerodynamics of aircraft and especially for drag reduction. In addition, the institute investigates methods for flow measurement and flow manipulation and also conducts special experiments on the icing of aircraft. Prof. Radespiel is also the spokesperson for the [Lower Saxony Research Centre for Aviation](#) and co-spokesperson for SE²A.

[Prof. Jens Friedrichs](#) has been the head of the [Institute of Flight Propulsion and Turbomachinery at TU Braunschweig](#) since 2010. The focus of his experimental and numerical research is on new propulsors, i.e. new propulsion concepts and their integration into the aircraft. Wear and maintenance models for aircraft propulsion systems are also developed at the institute. Prof. Friedrichs is the spokesperson for the [Mobility Research Centre at the TU Braunschweig](#) and spokesperson for the SE²A Cluster of Excellence.

The German science podcast on current science topics reflects the research diversity of Germany's leading research institutions and Clusters of Excellence: from Africa Studies to Quantum Physics. In each episode, listeners can expect insights into the interdisciplinary work of one research network. The researchers of the clusters of excellence, funded by [DFG](#) talk to podcaster Larissa Vassilian about how they want to find scientifically based answers to relevant topics of our time – for the society of tomorrow. Listen in and follow us: <https://exzellente-erklart.podigee.io/>