

Experimental Aerodynamics Lab., Dept. of Aerospace Engineering

Asai·Ozawa/Nonomura·Nagata·Nakai Lab.

XAsai Ozawa lab and Nonomura Nagata Nakai Lab are cooperated



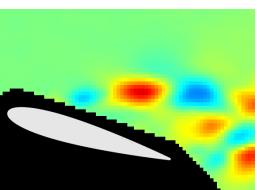
One for all, all for one

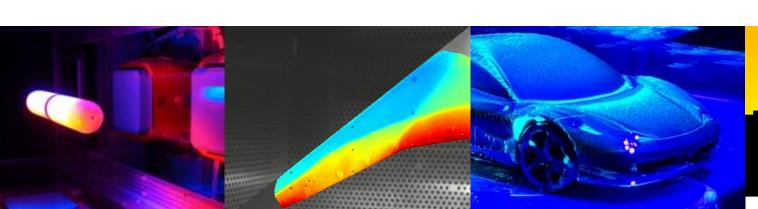
Laboratory of world top-level experimental aerodynamics and data-driven science

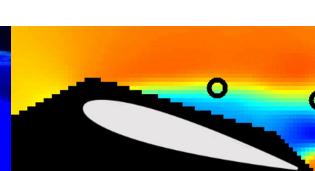


Associcate Prof. Nonomura









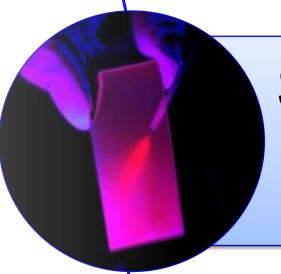
Modeling and Analysis based on Data-driven Science

Wind tunnel experiments

-low to high

speed flows-

Create Flow (Dynamic Wind Tunnel Group) Magnetic Suspension and Balance System



Sense Flow (Advanced Measurement Group)

- Molecular Sensors for Flow Measurement術
- Data-driven Superresolution Measurement



Manipulate Flow (Flow Control Group)

- Data-driven Reduced Order Modeling and Sparse Sensing
- Low-Reynolds Number Aerodynamics-Mars Wind Tunnel

Create Flow (Dynamic Wind Tunnel Group)

- Magnetic Suspension and Balance System (MSBS)
- Three-Dimensional Wake Flow Utilizing MSBS

Sense Flow (Advanced Measurement Group)

- Molecular Sensors for Extreme Flow Measurement
- Pressure and Temperature-Sensitive Paints (PSP/TSP), Lu minescent Oil Film Technique (GLOF)
- Subsonic to Supersonic Flow around a Sphere at Low Re
- Data-driven Superresolution Measurement

Manipulate Flow (Flow Control Group)

- Data-driven Reduced Order Modeling and Sparse Sensing
- Low-Reynolds Number Aerodynamics-Mars Wind Tunnel
- Active Flow Control using Plasma Actuators