

Welcome to 2nd Workshop

Prof. Dr. Jörg Ettrich

programme

- **Welcome & Introduction**
- **The “Stork” Drone**
- **The “Delta” Drone**

45 min. | coffee break

- **Manufacturing, Mechanical Simulations & Wing Optimization**
- **Embedded Air Quality Sensing**
- **Additive Tooling**

60 min. | lunch break

- **Electronic Design and Automatic Flight Control**
- **Autonomous Control Strategy**
- **Optimal Load-Distribution for Non-Planar Wings**

120 min. | coffee break

- **Conclusions & Outlook**

closing | open end

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programme

Helicopter flight demonstration

- Manufacturing, Mechanical Simulations & Wing Optimization
- Embedded Air Quality Sensing
- Additive Tooling

Drone exhibition

- Electronic Design and Automatic Flight Control
- Autonomous Control Strategy
- Optimal Load-Distribution for Non-Planar Wings

Drone flight demonstration

- Conclusions & Outlook

“Hands-On” Helicopters & Multicopters

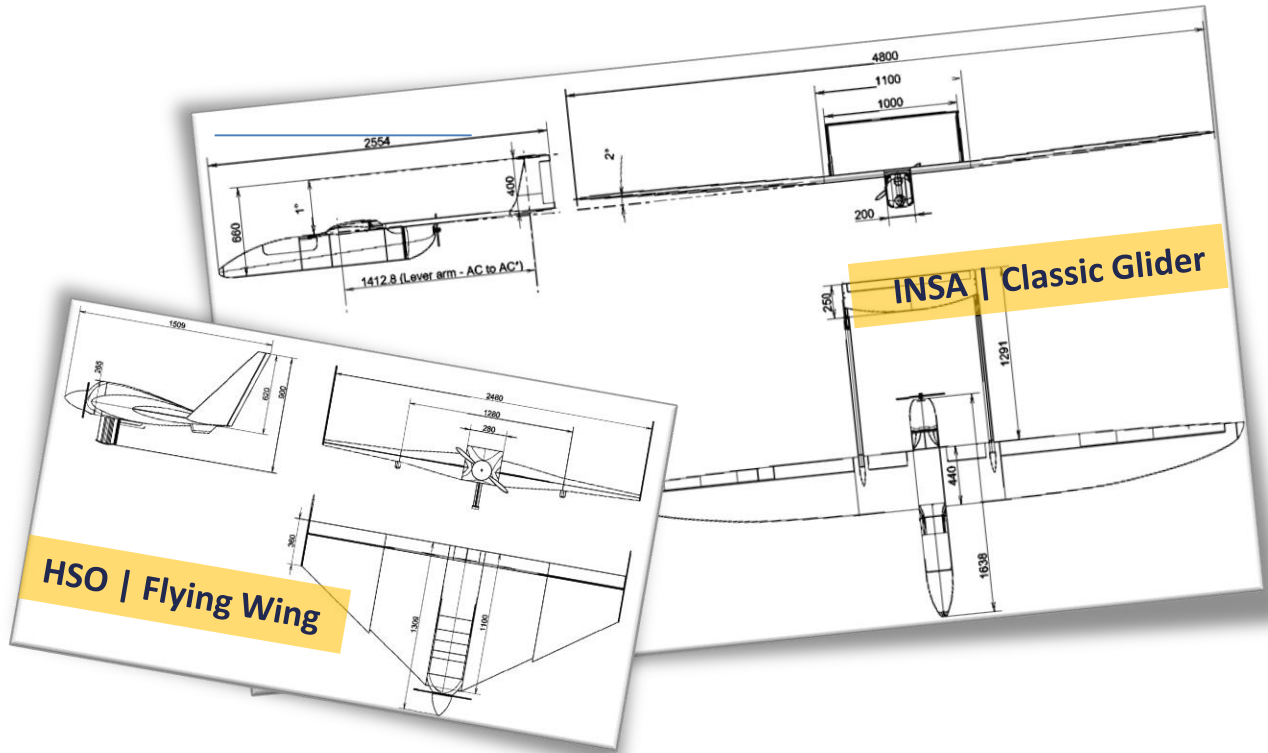
Roadmap

Different Specifications – Different Designs



Roadmap

Different Objectives – Different Design Philosophies



Roadmap

Design & Manufacture



two build strategies



Roadmap

Different Specifications – Different Designs



Roadmap

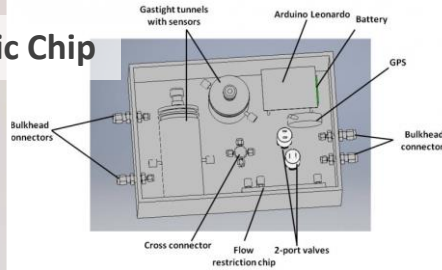
Maiden Flights & Testing



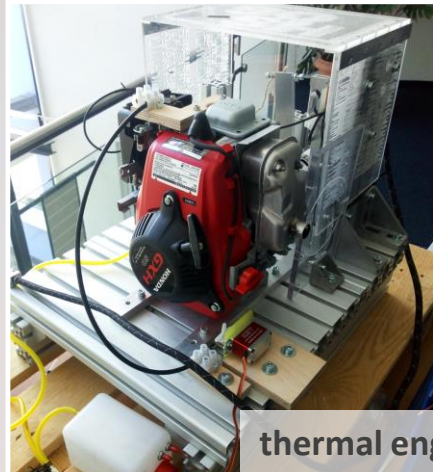
Current Activities

There is still work to do!

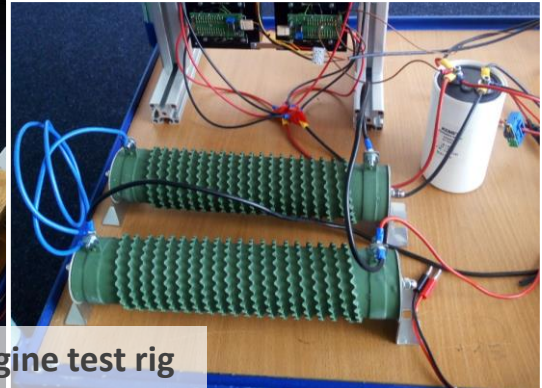
Printed Microfluidic Chip



laboratory sensor prototype



thermal engine test rig



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what's next?



Helicopter flight demonstration

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**Thank you for your
attention!**