# Simulations of HLFC, unswept wing for short range aircraft

## Master thesis/Student project

LE suction

### **Study objectives:**

- Model unswept, finite, HLFC wing for short-range aircraft at flight Mach number 0.4 and Reynolds number 16 Million
- Investigate the effect of suction on BL and pressure distribution
- Investigate the effect of finite wing (aspect ratio) for HLFC application
- Extract BL details and compare to lower fidelity

#### Tools:

- DLR TAU solver
- Stability tools: Boundary layer (COCO) and LST (LILO) solvers

#### **Required:**

- Master student who completed his course work in CFD and aerodynamics

Start date: From Sep. 2021

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