

Effect of suction on pressure distribution and boundary layer of an airfoil at transonic flight conditions

Master thesis/Student project

Study objectives:

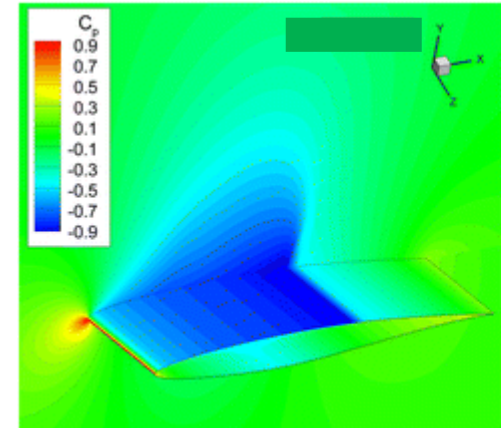
- Model infinite swept wing with suction at transonic flight conditions using TAU solver
- Estimate the effect of suction on pressure distribution, and compare with lower fidelity solver (MSES)
- Extract the BLS from N-S equations solver and compare with BL solver results.

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

Thesis adviser: Dr. Camli Badrya/Anand Sudhi

Contact info.: c.badrya@tu-Braunschweig.de

a.sudhi@tu-Braunschweig.de