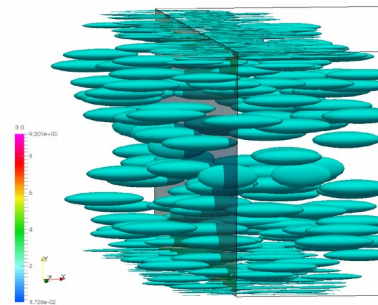


Topic for a Master Thesis

## Evaluation of an Improved Method for Generation of Inflow Turbulence

The Chair of Modelling and Simulation develops methods for generation of synthetic turbulence at inflow boundaries of LES or DNS simulations. Before any implementation into the CFD code, the properties of every new inflow generation procedure has to be tested using simple programs which run the generation procedure without solving the actual flow problem.



During this work, a newly developed extension of the inflow generation algorithm has to be evaluated a priori using a simple FORTRAN program. The following tasks have to be completed:

- Learning the inflow generation procedure and implement it into the supplied test program
- Selecting relevant turbulence states which occur in the boundary layer, attempt to synthesize the turbulence for these states
- Documentation and presentation of the results

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