

Technische Universität Braunschweig

Institute of Fluid Mechanics



Aerodynamic design of a high-lift system for a laminar wing

Project Description

The Cluster of Excellence SE²A on <u>Sustainable and</u> <u>Energy-Efficient Aviation</u> is an interdisciplinary research center investigating technologies for a sustainable and ecofriendly air transport system. Within this Cluster, the research group on <u>Flow Physics of Load Reduction</u> investigates active flow control for alleviating dynamic loads on the wings of transport aircraft to reduce their weight.



The SE²A Cluster's International Female Programme supports paid research internships for female graduates from universities outside Germany to conduct limited (6 month) research projects at the TU Braunschweig on Cluster-relevant topics. During these internships, we also offer German language classes that will be paid by the institutes.

Within this programme, we seek a research intern to carry out the design of a high-lift system for the Cluster's research aircraft configuration, shown above. The assigned tasks involve the creation of computational meshes, flow simulations with the DLR-TAU code, and analysis of the results. Upon successful completion of the project, and dependent on available positions, we strive to hire the research intern for a full-time PhD researcher position within or outside the SE²A Cluster.

Requirements

- Female candidates who have completed or are in the process of completing a Master's degree in Aerospace Engineering, Mechanical Engineering or a comparable field
- Basic experience with preparing, executing and evaluating numerical flow simulations
- High proficiency in written and spoken English

Contact information

Interested? Then please send your application, including your CV, transcript of records, and letter of motivation to <u>a.bauknecht@tu-braunschweig.de</u>.

The start date is as soon as possible, and the duration of employment is limited to 6 months. The position is part-time with 50% of the regular weekly working time (currently 19.9h). Ongoing applications are possible until all positions are filled. The payment is made according to task assignment and fulfillment of personal requirements to salary group EG 13 TV-L. International applicants may have to successfully complete a visa process before hiring can take place. Candidates with handicaps will be preferred if equally qualified. Please enclose a proof. The position is part of the SE²A International Female Programme, so only applications by female graduates of non-German universities are possible. All documents should be in PDF format, preferably in a single file. Personal data and documents relating to the application process will be stored electronically. Please note that application costs cannot be refunded.