

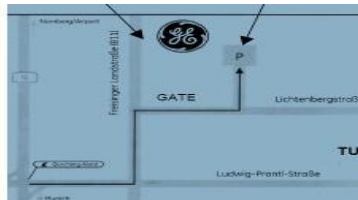
# Registration

[www.ercoftac.org](http://www.ercoftac.org)

## Location

GE Global Research Centre  
Freisinger Landstraße 50  
D-85748 Garching b. Munich  
Germany

The GE Global Research centre is located on the outskirts of Munich with excellent access to the city centre and Munich Airport by the autobahn, ring road and train networks.



## Course fees

€590 ERCOFTAC members  
€850 Non-ERCOFTAC members

This fee includes: course registration, seminar material, lunch, refreshments and seminar dinner. Please note that accommodation is not included in this fee.

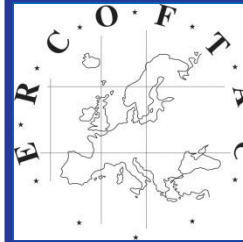
## Registration

Please contact ERCOFTAC at the earliest opportunity to reserve a place:

Dr. Richard E. SEOUD

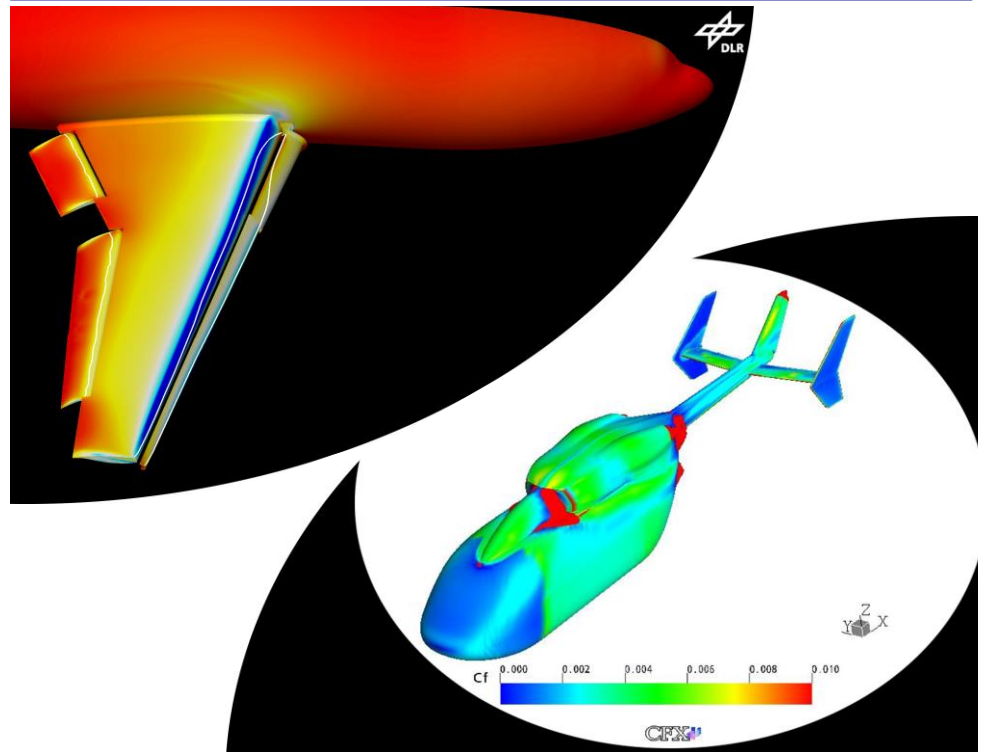
Email: [richard.seoud-ieo@ercoftac.org](mailto:richard.seoud-ieo@ercoftac.org)

For further information: [www.ercoftac.org](http://www.ercoftac.org)



# Transition Modelling III (3<sup>rd</sup> delivery) SIG 10

[www.ercoftac.org](http://www.ercoftac.org)



21-22 May 2015

GE Global Research Centre,  
Munich, Germany

# Information

After two successful realizations **ERCRAFT** is proud to announce another two day course on Transition Modelling thematically adapted to current fields of high importance and interest.

## Aims and Scope

With the general increase of the use and importance of CFD methods and the increased wish for highly accurate simulations, the need has grown for the availability of reliable transition prediction methods for configurations from many different application areas ranging from turbomachinery and aircraft flows to helicopters and wind turbines. On the one hand, the physical effects to be simulated, the transition mechanisms and their parameters have grown. On the other hand, the configurations are becoming more and more complex. Thus, the availability of different transition modelling approaches serving as complementary techniques in CFD codes is highly beneficial.

The aim of the course is to discuss the physical phenomena in different transition processes and the appropriate approaches for considering them in CFD simulations focusing on external aerodynamic flows and internal turbomachinery flows based on the intense development of transition modelling approaches which have been realized in the last decade. Topics of growing importance are transition in flows over vehicles at supersonic and hypersonic speeds and environmental influences on transition at laminar flow technology aircraft.

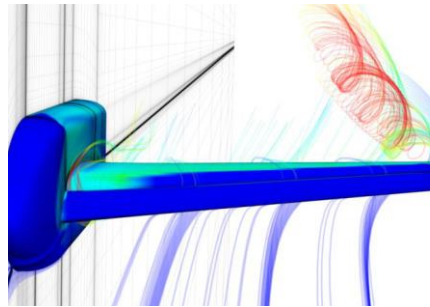
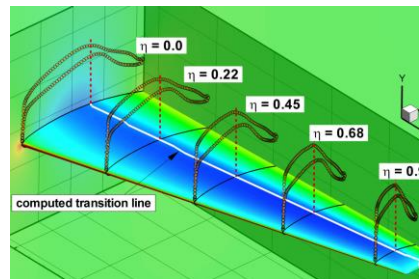
## Specifically, the course aims to provide:

- Overview of transition modelling approaches
- Discussion of transition mechanisms
- Detailed discussion of approaches, dependent on the application area
- Recommendation for appropriate and effective application of transition modelling approaches

## Speakers

- Dr. Andreas Krumbein, DLR, Germany
- Prof. J. Pralits, University of Genoa, Italy
- Dr. Florian Menter, Ansys, Germany
- Dr. Stefan Hein, DLR, Germany
- Dr. Géza Schrauf, Airbus, Germany

**Coordination:** Dr. Andreas Krumbein



# Programme

## Thursday 21 May 2015

09:00	Introduction to transition modelling	Dr. A. Krumbein
10:15	Refreshments	
10:45	Physics of Transition I	Prof. J. Pralits
12:00	Lunch	
13:00	Physics of Transition II	Prof. J. Pralits
14:15	Transition modelling in RANS solvers for external flows I	Dr. A. Krumbein
15:30	Refreshments	
15:45	Transition modelling in RANS solvers for external flows II	Dr. A. Krumbein
17:00	Q&A Session	

## Friday 22 May 2015

09:00	RANS transition modelling using transport equations I	Dr. F. Menter
10:15	Refreshments	
10:45	RANS transition modelling using transport equations II	Dr. F. Menter
12:00	Lunch	
13:00	Transition Modelling for high speed flows	Dr. S. Hein
14:15	Refreshments	
14:45	Influence of Surface Imperfections (surface roughness, steps, gaps, ...) and Suction on Transition (Hybrid Laminar Flow Control)	Dr. G. Schrauf
16:00	Q&A Session	
	Close	

