



**A EUROPEAN SYNERGY  
FOR  
THE ASSESSMENT OF WALL TURBULENCE.**

PROJECT N°: AST4-CT-2005-516008

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## **Final Announcement**



**Progress in Wall Turbulence : Understanding and modelling**

**Lille (France) : April 21-23 2009**

**Organized by the WALLTURB Consortium and ERCOFTAC**

**Organizing Committee: M. Stanislas, LML UMR 8107, France**

**J. Jimenez, Polytechnic University of Madrid, Spain**

**I. Marusic, University of Melbourne, Australia**

**Website : [http://lmlm6-62.univ-lille1.fr/Wallturb\\_Workshop/](http://lmlm6-62.univ-lille1.fr/Wallturb_Workshop/)**

## ***WALLTURB Consortium***

The WALLTURB consortium is composed of 16 partners. This consortium includes high level industrials from Aeronautics, large public research organizations and well known Universities from the Mechanical Engineering and Aeronautical field. All partners are strongly involved in the research on turbulence at European and International level.

LML UMR CNRS 8107, Ecole Centrale de Lille	F
ONERA	F
LEA UMR CNRS 6609 Université de Poitiers	F
LIMSI UPR CNRS 3251	F
Chalmers University of Technology	SE
ENSTA/ARMINES	F
CNRS SPEC/CEA Saclay	F
University of Cyprus	CY
University of Rome la Sapienza	IT
University of Surrey	UK
Polytechnic University of Madrid	SP
Technische Universität München	G
Technical University of Czestochowa	PL
Norwegian Defence Research Establishment	NO
AIRBUS	UK
DASSAULT AVIATION	F

**List of WALLTURB partners**

## ***WALLTURB project***

The WALLTURB project is an upstream research program which has started in April 2005 for 4 years.

The global aim of WALLTURB is to bring a significant progress in the understanding and modelling of near wall turbulence in Boundary Layers. This goes through:

- generating and analyzing new data on near wall turbulence,
- extracting physical understanding from these data,
- putting more physics in the near wall RANS models,
- developing better LES models near the wall,
- investigating alternative models based on Low Order Dynamical Systems (LODS).

For that purpose, the WALLTURB Consortium has undertaken to:

- put in a common database, shared by the WALLTURB partners, the existing relevant data they have about near wall turbulence (from both experiments and DNS),
- generate by experiment, and by complementary DNS, equivalent data for the Adverse Pressure Gradient Turbulent Boundary Layer physics (including separated flow cases), and to put them in the common database,
- use this database to improve near wall turbulence models such as RANS, LES and LODS, and especially to understand their relative strengths and weaknesses.

## ***Aim of the Workshop***

The aim of the workshop is to bring together world specialists of near wall turbulence and to stimulate exchanges between them around up-to-date theories, experiments, simulations and numerical models.

For that purpose, the partners of the WALLTURB Consortium will present the main results of their 4 years of

joint research.

Scientists outside the consortium are warmly invited to present their recent research in the field and participate to the discussions which will be organized during the workshop.

After the Workshop, a book will be published with full papers corresponding to the presentation done during the meeting .

## ***Venue***

Lille is the center of an agglomeration of 1 Million people, located 200 km north of Paris, near the Belgium border. It is the capital of the French "Flandres". It is connected by TGV to Paris (1hour), London (1h30'), Brussels (20') and Charles de Gaulle Airport (1h). It has the second collection in paintings in France, after le Louvre, a renowned modern art Museum and a very vivid town center. It was European Capital of Culture for one year in 2004.

## ***Proceedings***

A book of proceedings will be published after the meeting with the papers presented during the workshop. Each participant will receive one book of proceedings.

Submissions to be made to :

**Pr Stanislas**  
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**Cité scientifique**  
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## ***Access & lodging***

All details for access and lodging are available on the following website :

[http://lmlm6-62.univ-lille1.fr/Wallturb\\_Workshop/](http://lmlm6-62.univ-lille1.fr/Wallturb_Workshop/)

## ***Registration***

The cost of the workshop is 350 Euros including the booklet of abstracts, the lunches and coffee breaks, the workshop dinner and the workshop proceedings.

Early registration before March 1<sup>st</sup> is 250 €

Registration should be sent to the WALLTURB coordinator:

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