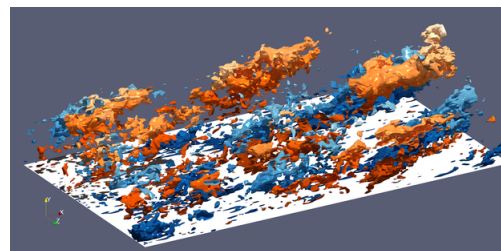
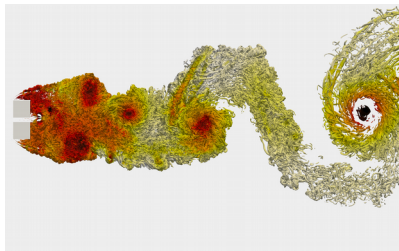
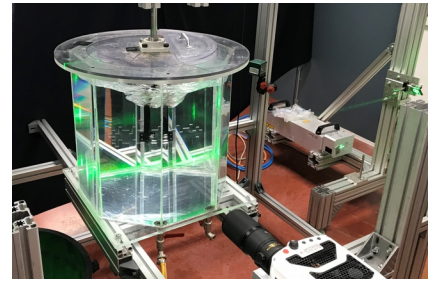
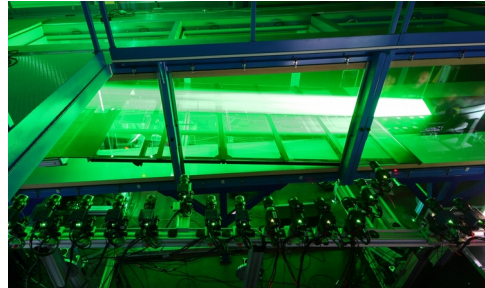


## 2-years Post-Doc

### Direct Numerical Simulations of Turbulent Flows

#### ERC NoStaHo

#### NON-STATIONARY NON-HOMOGENEOUS TURBULENCE



#### Subject:

The post-doctoral researcher will participate in the ERC Advanced Grant research project NoStaHo which is aimed at an extensively transformative fundamental understanding and theory of non-stationary and/or non homogeneous turbulence with the identification of universality classes depending on types of non-homogeneity/non-stationarity and a consequent road map for turbulent flow prediction methods.

The post-doctoral research will participate in the setting up of the numerical side of the of the project by contributing to Direct Numerical Simulations and various ways to analyse the data obtained for a variety of turbulent flows including various types of turbulent wakes, jets and boundary layers. Among the many aspects of the flows to concentrate on, are coherent structures and their impacts on turbulence energy exchanges, turbulence cascades and dissipation; impacts of these energy exchanges/transfers through space and across different size eddies.

The post-doc will be a member of the turbulence group of the LMFL and of the NoStaHo research team (including 2 post-docs and 4 PhDs). She/he will be supported by the experimental, computational and theoretical experts of the group. The numerical works will benefit from the national supercomputing facilities.

**Laboratory:** (<http://lmfl.cnrs.fr/>)

Laboratoire de Mécanique des Fluides de Lille – Kampé de Fériet (LMFL) is a joint laboratory between: ONERA, CNRS, Centrale Lille, University of Lille, Ecole Nationale Supérieure d'Arts et Métiers (ENSAM), where 35 permanent researchers and engineers work in the fields of turbulence, aerodynamics and flight physics. The team hosting the Post-Doc is involved in the fundamental and applied study of turbulence and optical measurement techniques.

**Contract:**

This position will be administered by the CNRS and is initially for 2 years with a possibility of extension depending on performance.

**Candidate:**

The candidate will have a PhD in computational fluid dynamics, with experience in the field of turbulence. Candidates should apply through the CNRS portal <https://emploi.cnrs.fr/> by 11/09/2022.

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