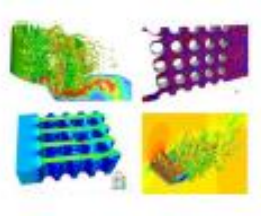


ERCOFTAC SIG 41

Fluid-Structure Interaction with impact on industrial applications

6-7 June 2017

IMFT www.imft.fr

Location: IMFT, Amphitheater Nougaro

Building A – 1st Floor

Allée du prof. Camille Soula – île du Ramier

31400 Toulouse

Event in association with the "Chantier STAE-RTRA-SMS"

Coordinators:

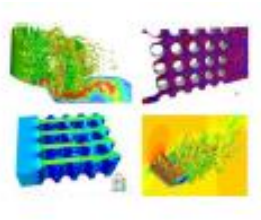
Dr. Marianna Braza , IMFT, France - Elisabeth Longatte, EDF R&D, France

Yannick Hoarau – ICUBE - Strasbourg

Agenda

Tuesday 6 June 2017

9 :00	Coffee & Registration	
09:15	Welcome & Introduction	Dr. M. Braza, Dr. E. Longatte, & Prof. Y. Hoarau
09:30	Parallel adaptive finite element simulation of turbulent flow and fluid-structure interaction with complex geometries	Prof. M. Khalloufi & Prof. E. Hachem
10:15	Using CFD in the context of vibration risk assessment in nuclear heat exchangers : challenge to real scale	Dr. E. Longatte
11:00	Refreshment	
11:30	Reduced-order modelling for Fluid Structure Interaction	Dr. E. Liberge
12:15	Numerical aspects for efficient FSI co-simulation in hydrodynamics and applications	Prof. A. Le Royer
13:00	Lunch	
14:00	Mechanism of vibration initiation of a cylinder submerged in wakes	Prof. M. Alam
14:45	Mechanisms and statistical models of external and internal interfacial turbulent shear layers	Prof. J.C.R. Hunt
15:30	Refreshment	
16:00	Chimera method and application to fluid-solid interactions	Prof. Y. Hoarau
16:45	Close & Visit of the Morphing Facilities IMFT	



Dinner at 20h at Brasserie “Le Si Bémol” ,17 Place Dupuy Toulouse
Tel: 05 61 62 42 22

Wednesday 7 June 2017

08:45	Coffee	
09:15	Flow induced vibration of cylinders in tandem	Dr. D. Lo Jacono
10:00	Improvement of aerodynamic performances of new generation wings by means of electroactive morphing	Dr. M. Braza
10:45	Refreshment	
11:15	Numerical Methods for fluid-structure interactions : stable fictitious domain approach	Dr. Fournié
12:00	FSI for slender bodies : Lattice Boltzmann with Finite Element Method	Dr. J. O'Connor
12:45	Lunch	
13:45	Immersed boundary method with an efficient implicit direct forcing for fluid-structure applications	Prof. A. Ouahsine & S.G. Cai
14:30	Vortex-induced vibrations of freely rolling bluff bodies	Dr. F. Houdroge & Prof. K. Hourigan
15:15	Close & Round Table discussion «GDR/ IFS »	