**Liste keynotes**

**Joris Degroote**

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Title: Partitioned Simulation of Flow-Induced Vibration in Tube Bundles

Bio: Joris Degroote obtained his PhD at UGent, did research stays at MIT (USA) and TUM (Germany), and became full professor at UGent in 2020. His research focuses on simulation of fluid-structure interaction (FSI) and flow-induced vibration (FIV). Fundamental aspects of algorithm development and applications in mechanical energy engineering such as nuclear reactors and wind energy are both investigated. His team develops the CoCoNuT coupling software, an object-oriented code for partitioned simulation of coupled problems.

**Céline Gabillet**



Title: The control of vortex induced vibrations for naval hydrodynamics.
Bio: Céline Gabillet, Institut  de Recherche et d’Etudes Navales, France Associate Professor in Fluid Mechanics at the French Naval Academy, her research topics focus on experimental fluid dynamics relevant to naval hydrodynamics. She is particularly  interested in turbulent flows, instabilities, two-phase bubbly flows and fluid-structure interactions.  Her current research focuses on the control of vortex induced vibrations using various technics such as piezo-electric control or bubble generation.

**Yannick Hoarau**

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Title: Increase of aerodynamics performances of an A320 wing through morphing.
Bio: **Professor of Fluid Mechanics at the University of Strasbourg**

Prof. Yannick Hoarau was born in 1973 and graduated as an aeronautical engineer (ENSICA, Toulouse, France) in 1996. He obtained his PhD on the numerical simulation of unsteady turbulent flow in 2002 in Toulouse, France. During his PhD and his post-doctorate, he participated in many EU projects (UNSI, FLOMANIA, DESIDER, UFAST, TFAST) on turbulence modeling. He was appointed as an assistant professor in fluid mechanics in 2005 in the faculty of physics and engineering of the University of Strasbourg and affected to the IMFS laboratory (which became the ICube laboratory in 2013). He became an associate professor in 2011 and full professor in 2015 at the University of Strasbourg. He is the course director of a master in “Mechanical Modeling for Ener yen Environment” since 2011. Currently he is the head of the mechanics department of the ICube laboratory, one of the four departments of the ICube laboratory. Between 2019-2021 he has been deputy vice-president for research of the University of Strasbourg in charge of Research Data and Open Science.

His fields of expertise are : computational fluid dynamics, high performance computing, unsteady turbulence modeling, fluid – structure interactions, shock waves – boundary layer interactions, icing modeling. He is also one of the major contributors to the development of the NSMB solver (https://www.cfse.ch/html/cfse/site/tools-NSMB.php), a parallel Navier-Stokes solved developed within an European consortium.

**Salim El Bouzidi**

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Title:

Bio:

Salim El Bouzidi is the Head of the Dynamics, Measurements, and Analytics Section of the Fluids Engineering Branch at Canadian Nuclear Laboratories. The group he leads has been involved in FIV research since 1965, initially established by Michel Pettigrew. He is leading and contributing to flow-induced vibration research related to CANDU reactors, light water reactors, and high-temperature gas reactors.

Salim’s interests have spanned developing an understanding of fundamental flow-structure coupling phenomena in reactor vessels, valves and steam generators, as well as developing practical analysis techniques to support reactor licensing and fitness-for-service assessments.

Salim also leads commercial and fundamental research activities at CNL related to diagnostics and monitoring techniques for nuclear plant components, such as the use of artificial intelligence for plant diagnostics, the use of noise analysis techniques for neutron and process instrument noise, and the use of acoustic emission techniques for valve leakage detection and pump seal condition monitoring.

Salim is a professional engineer with 13 years of experience in nuclear-related academic and industrial R&D. He holds a Bachelor of Science in Mechanical Engineering from the University of New Brunswick, a Master of Applied Science from the University of Guelph, and a Ph.D. in Mechanical Engineering from McMaster University.