

List of all conference presentations

Invited Lectures

- F.S. Hover (Opening lecture)
Statistical tools in modeling Vortex-Induced Vibration of distributed structures
- J.-M. Chomaz, P. Meliga & D. Sipp
Unsteadiness in the wake of the sphere: receptivity and weakly non-linear global stability analysis
- J. M. R. Graham & N. Bampalas
Strip theory prediction of marine riser VIV and hydrodynamics of clashing
- J. Magnaudet
Spheroidal bubbles as an archetype of light, freely-moving axisymmetric bodies
- E. Meiburg, S. G. Constantinescu & E. D. Gonzales-Juez
The interaction of gravity currents with submarine installations: high-resolution simulations of the impact stage
- J. K. Vandiver
Insights on the Flow-induced Vibration of flexible cylinders
- J. E. Wesfreid
Physics of the temporal and spatial forcing in flows (wakes, separated flows and boundary layers)

Bluff Body Wakes – Spheres

- M. Horowitz & C. H. K. Williamson
Dynamics and wake patterns of rising and falling spheres
- J. Miedzik, K. Gumowski, S. Goujon-Durand, G. Bouchet, P. Jenffer & J. E. Wesfreid
Wake behind a sphere in early transitional regimes
- L. Prahl, J. Revstedt & L. Fuchs
The interaction between two spherical particles in an oscillatory flow

Bluff Body Wakes – Stability and Ginzburg-Landau Analyses

- K. P. Burr & J. A. P. Aranha
The complex Ginzburg-Landau equation and Norberg's lift crisis
- O. Cadot, B. Thiria & J.-F.
Beaudoin Sensitivity of global mode instability to local and stationary disturbances in a turbulent wake
- J.-M. Chomaz, C. Donnadieu & S. Ortiz
Three-dimensional instabilities and transient growth of trailing vortices in homogeneous and stratified flows
- R. S. Gioria, B. S. Carmo & J. R. Meneghini
Floquet stability analysis of the flow around an oscillating cylinder
- L. M. Y. da Silveira, C. de A. Martins & J. A. P. Aranha
A qualitative study of the response of the Ginzburg-Landau equation when coupled to the structural model of a submerged cable

Bluff Body Wakes – Multiple Cylinders

- I. Korkischko, J. R. Meneghini, E. Casaprima & R. Franciss
An experimental investigation of the flow around isolated and tandem straked cylinders
- N. Kevlahan
3D flow stability in rotated and inline tube bundles
- J. Lee, P. Anagnostopoulos & S. A.
Seitanis Numerical study of oscillatory flow past four cylinders in rectangular arrangement

Bluff Body Wakes – Other Topics

- I. C. Barbeiro, J. A. P. Aranha & J. R. Meneghini
Numerical investigation into the asymptotic solution of the viscous flow around a circular cylinder for $Re \leq 600$
- T. Bewley, J. Pralits & P. Luchini
Minimal-energy control feedback for stabilization of bluff-body wakes based on unstable open-loop eigenvalues and left eigenvectors
- R. Bourguet, M. Braza, J. B. Vos, R. Perrin & G.
Harran Anisotropic Organized Eddy Simulation approach for strongly detached unsteady flows
- S. J. Chetan & D. S. Luff
Dynamics of vortex shedding from cones
- O. Frederich, J. Scouten, M. Luchtenburg & F. Thiele
Database variation and structure identification via POD of the flow around a wall-mounted finite cylinder
- E. M. Gennaro & M. A.
Faraco de Medeiros Temporal development of an inviscid asymmetric wake
- E. D. Gonzales-Juez, E. Meiburg & S. G.
Constantinescu A study of the interaction of a gravity current with a circular cylinder
- P. N. Lavinias, I. C. Barbeiro & J. A. P. Aranha
2D steady symmetric flow around a circular cylinder for $Re < 600$: sensibility to standard far-field boundary conditions and “wake impedance” alternative formulation
- B. Levy, P. Brancher & A. Giovannini
Topology of the flow around a vehicle A-pillar: an experimental characterization
- T. Leweke, K. Hourigan & M. C. Thompson
Motion of a Möbius band in free fall
- P. Luchini, F. Giannetti & J. Pralits
An iterative algorithm for the numerical computation of bluff-body wake instability modes and its application to a freely vibrating cylinder
- G. Martinat, Y. Hoarau, F. Dehaeze & M. Braza
Numerical simulation of the flow in the wake of Ahmed body using Detached Eddy Simulation and URANS modeling
- H. Nagib, P. Reinhard & J. Kiedaisch
Non-linearities exhibited in control of separated flows
- M. A. Ortega, R. M. Girardi & J. H. Silvestrini
Some physical aspects of the wake behind a two-dimensional body with a blunt trailing edge and fitted with splitter plates
- L. C. Pinto, D. C. Buarque, E. B. C. Schettini & J. H. Silvestrini
Numerical simulation of vortex wake from a cylinder in an elliptical trajectory
- B. Protas
Vortex models for feedback stabilization of bluff body wake flows
- S. Shukla, R. N. Govardhan & J. H. Arakeri
Flow over a bluff body with a flexible splitter plate
- J. H. Silvestrini & E. Lamballais
Vortex dynamics of a separated boundary layer on a rounded edge by Direct Numerical Simulation
- K. Taira & T. Colonius
Three-dimensional simulation of flow around a rectangular flat plate
- J. M. Vedovoto, R. Campregheer & A. Silveira-Neto
Simulation of the flow past three-dimensional bluff bodies using Immersed Boundary Method and the Virtual Physical Model

M. de A. Vitola, E. B. C. Schettini & J. H. Silvestrini

The influence of constant shear over the structures developed in the wake of a circular cylinder

Vortex-Induced Vibrations – Controlled Vibration

L. Kaiktsis & G. S. Triantafyllou

Computational study of hydrodynamic forces on a cylinder vibrating transversely and in-line to a steady stream

T. L. Morse & C. H. K. Williamson

Understanding mode transitions in vortex-induced vibration using controlled vibration

J. L. Szwalek & C. M. Larsen

Reynolds number effects on A/D using forced sinusoidal oscillations

R. H. J. Willden, R. J. McSherry & J. M. R. Graham

Prescribed cross-stream oscillations of a circular cylinder at laminar and early turbulent Reynolds numbers

Vortex-Induced Vibrations – Risers

A. L. C. Fajarra, C. P. Pesce, K. Nishimoto, M. Cueva & F. Faria

Non-stationary VIM of two mono-column oil production platforms

S. Kato, S. Uto, S. Masanobu, H. Suzuki, H. Hiriyama & K. Mochida Riser motion estimation of oil production system for ultra deep water

A. A. de Lima, J. R. Meneghini, R. B. Flatschart, M. Mourelle & E.

Casaprima Fatigue analysis of a marine SCR (steel catenary riser) due to vortex-induced vibration

C. K. Morooka, R. Franciss, C. G. C. Matt & P. S. D. Pereira

Dynamical analysis of deep water rigid risers: VIV effects

P. S. D. Pereira, K. Maeda, C. K. Morooka & S. Uto

Model tests of self standing hybrid riser in deep-sea basin

S. B. Swithenbank, H. Marcollo & J. K. Vandiver

Time-sharing of frequencies in high-mode number Vortex Induced Vibrations

Vortex-Induced Vibrations – Multiple Cylinders

M. M. Alam & Y. Zhou

Shear-layer-reattachment-induced vibration on a circular cylinder placed behind another

G. R. S. Assi, P. W. Bearman & J. R. Meneghini

Dynamic response of a circular cylinder in the wake of an upstream fixed cylinder

B. S. Carmo, S. J. Sherwin, P. W. Bearman & R. H. J. Willden

Numerical simulation of the flow-induced vibration in the flow around two circular cylinders in tandem arrangements

P. J. S. Jabardo, B. S. Carmo & J. R. Meneghini

Two- and three-dimensional force coefficients of the flow around two circular cylinders in tandem

A. D'Agostini Neto & F. Saltara

Simulation of vortex induced vibration of pairs of cylinders in tandem arrangement using deforming meshes

A. A. P. Pereira, A. L. C. Fajarra & E. J. B. Ribeiro

Interference and clashing experiments with two flexible cylinders on a cavitation tunnel

T. K. Prasanth & S. Mittal

VIV of two circular cylinders in tandem arrangement at low Re

Vortex-Induced Vibrations – Inclined Cylinders and Suppression

G. R. S. Assi & P. W. Bearman

Low drag solutions for suppressing VIV of circular cylinders

A. De Vecchi, S. J. Sherwin & J. M. R. Graham

Wake dynamics of an external flow past oscillating curved cylinders

- S. Dong & G. E. Karniadakis
Suppressing the fluctuating lift and Vortex Induced Vibration of a circular cylinder
- A. C. Fernandes, F. M. Coelho & R. Franciss
Effectiveness of the guided porosity concept as VIV suppressor
- G. R. Franzini, A. L. C. Fugarra, J. R. Meneghini & R. Franciss
Experimental investigation of vortex-induced vibrations on rigid, smooth and inclined cylinders
- S. Mittal & T. K. Prasanth
*Hysteresis in VIV at low Re: effect of blockage & m^**
- H. Suzuki, J. Minamiura, M. Ozaki, Y. Arima & R. Kimura
Time domain VIV analysis of inclined towed pipe based on lookup table of VIV hydrodynamic force
- J. B. V. Wanderley, G. H. B. Souza, S. H. Sphaier & C. Levi
Upwind TVD two-dimensional numerical simulation of vortex- induced vibration of a circular cylinder

Vortex-Induced Vibrations – Other Topics

- S. Balabani, E. Konstantinidis, C. Liang & G. Papadakis
Numerical study of the effect of velocity perturbations on the mechanics of vortex shedding in synchronized bluff body wakes
- S. Kocabiyik, O. I. Gubanov & L. A. Mironova
Forced wake development caused by fluid, body and free surface interaction
- F. Nagao, M. Noda, A. Iwata & H. Utsonomiya
Properties of vortex induced vibration of $B/D = 2$ rectangular cylinder under slow change of wind speed
- R. Violette, E. de Langre & J. Szydlowski
Mode switching of a tensioned cable in vortex induced vibrations using a linear stability approach