

LISTE DES PUBLICATIONS

Diogo C. Barros
Maître de Conférences
Thématique de recherche : mécanique des fluides

ARTICLES - REVUES INTERNATIONALES

- 9 Barros, D.C., Duan, Y., Troolin, D. & Longmire, E. K. (2021) **Air-filled soap bubbles for volumetric velocity measurements.** *Experiments in Fluids* 62 (36)
- 8 Tee, Y.H., Barros, D.C. & Longmire, E. K. (2020) **Motion of finite-size spheres released in a turbulent boundary layer.** *International Journal of Multiphase Flow* 133, 103462
- 7 Barros, D., Hiltbrand, B. & Longmire, E. K. (2018) **Measurement of the translation and rotation of a sphere in fluid flow.** *Experiments in Fluids*, 59:104
- 6 Barros, D., Borée, J., Cadot, O., Spohn, A. & Noack, B.R. (2017) **Forcing symmetry exchanges and flow reversals in turbulent wakes.** *Journal of Fluid Mechanics*, 829, R1
- 5 Li, R., Barros, D., Borée, J., Cadot, O., Noack, B.R. & Cordier, L. (2016) **Feedback control of bimodal wake dynamics.** *Experiments in Fluids*, 57 (10), 158
- 4 Barros, D., Borée, J., Noack, B.R., Spohn, A. & Ruiz, T. (2016) **Bluff body drag manipulation using pulsed jets and Coanda effect.** *Journal of Fluid Mechanics*, 805, 429-455
- 3 Barros, D., Borée, J., Noack, B.R. & Spohn, A. (2016) **Resonances in the forced turbulent wake past a 3D blunt body.** *Physics of Fluids*, 28(6), 065104
- 2 Barros, D., Borée, J., Noack, B.R. & Spohn, A. (2014) **Control of a three-dimensional blunt body wake using low and high frequency pulsed jets.** *International Journal of Flow Control*, 6(1), 61–74
- 1 Östh, J., Noack, B.R., Krajnović, S., Barros, D. & Borée, J (2014) **On the need for a nonlinear subscale turbulence term in POD models as exemplified...** *Journal of Fluid Mechanics*, 747, 518-544

CONFÉRENCES INTERNATIONALES

- 11 Sasaki, K., Barros, D., Cavalieri, A.V.G & Larchevêque, L. (2020) **Causality in the shock wave turbulent boundary layer interaction.** *Bulletin of the American Physical Society, APS DFD Meeting Chicago, Illinois, USA, 19–22 November 2020*
- 10 Sareen, A., Altenburg, L., Barros, D. & Longmire, E.K. (2020) **Inertial effects on sphere settling through a liquid-liquid interface.** *Bulletin of the American Physical Society, APS DFD Meeting Chicago, Illinois, USA, 19–22 November 2020*
- 9 Barros, D., Troolin, D., Duan, Y., Longmire, E.K. & Lai, W. (2019) **Soap bubbles for volumetric velocity measurements in air flows** *13th International Symposium on Particle Image Velocimetry - ISPIV, Munich, Germany, July 22–24, 2019*

- 8 Tee, Y.H., Barros, D.C. & Longmire, E. K. (2019) **Three-dimensional tracking of finite-size spheres in a turbulent boundary layer.** *13th International Symposium on Particle Image Velocimetry - ISPIV Munich, Germany, July 22–24, 2019*
- 7 Tee, Y.H., Barros, D.C. & Longmire, E. K. (2018) **Investigation of sphere dynamics within a turbulent boundary layer.** *Bulletin of the American Physical Society, APS DFD Meeting Georgia, Atlanta, USA, 19–22 November 2018*
- 6 Tee, Y.H., Barros, D.C. & Longmire, E. K. (2018) **Translation and rotation of a spherical particle in a turbulent boundary layer.** *19th International Symposium on Applications of Laser and Imaging Techniques to Fluid Mechanics, Lisbon, Portugal, 16–19 July 2018*
- 5 Barros, D., Tee, Y.H., Morse, N., Hiltbrand, B. & Longmire, E. K. (2017) **Investigation of particle lift-off in a turbulent boundary layer.** *Bulletin of the American Physical Society, APS DFD Meeting Denver, Colorado, USA, 19–22 November 2017*
- 4 Altenburg, L., Barros, D. & Longmire, E.K. (2017) **Sedimentation of a sphere through a liquid-liquid interface.** *Bulletin of the American Physical Society, APS DFD Meeting Denver, Colorado, USA, 19–22 November 2017*
- 3 Barros, D., Borée, J., Noack, B.R. & Spohn, A. (2017) **Perturbing shear layers in turbulent wakes.** *10th – International Symposium on Turbulent and Shear Flow Phenomena (TSFP), Chicago, USA, 6–9 July 2017*
- 2 Barros, D., Borée, J., Noack, B.R., Spohn, A., Östh, J. & Krajnović, S. (2016) **Asymmetries and wake equilibrium past a square-back bluff body.** *Aerovehicles 2 – International Conference in Aerodynamics of Road Vehicles and Trains Göteborg, Sweden, 21–23 June 2016*
- 1 Barros, D., Borée, J., Noack, B.R. & Spohn, A. (2016) **Drag control of blunt vehicles using fluidic actuation.** *Aerovehicles 2 – International Conference in Aerodynamics of Road Vehicles and Trains, Göteborg, Sweden, 21–23 June 2016*

CONFÉRENCES NATIONALES

- 6 Barros, D., Borée, J., Noack, B.R., Spohn, A. & Ruiz, T. (2015) **Drag reduction of a blunt body by unsteady shear layer forcing and Coanda blowing.** *Congrès Français de Mécanique, Lyon, France, 24–28 August 2015*
- 5 Borée, J., Barros, D., Noack, B.R., Spohn, A. & Ruiz, T. (2015) **Drag reduction of a blunt body by unsteady Coanda blowing and shear layer forcing.** *Whither Turbulence and Big Data in the 21st Century. Understanding and Harnessing Turbulence, Cargèse, France, 20–24 April 2015*
- 4 Barros, D., Borée, J., Noack, B.R., Spohn, A. & Ruiz, T. (2014) **Drag control of a three-dimensional blunt body by periodic pulsed jets.** *GDR 2502 - Contrôle des Décollements, Orsay, France, 17–18 November 2014*
- 3 Barros, D., Östh, J., Borée, J., Noack, B.R., Ruiz, T. & Krajnović, S. (2014) **Flow around a three-dimensional blunt body: topology, dynamics and drag.** *Aerovehicles 1 – International Conference in Aerodynamics of Road Vehicles and Trains, Bordeaux, France, 23–25 June 2014*
- 2 Barros, D., Borée, J., Noack, & Ruiz, T. (2014) **Control of a three-dimensional blunt body wake using pulsed jets.** *Aerovehicles 1 – International Conference in Aerodynamics of Road Vehicles and Trains, Bordeaux, France, 23–25 June 2014*
- 1 Barros, D., Borée, J., Noack, Cordier, L. & Ruiz, T. (2013) **High-frequency forcing for drag reduction of a three-dimensional blunt body.** *Ercofac Sig-44 Workshop on Turbulent Flows: Fundamentals and Applications, Poitiers, France, 15–16 April 2013*