

Giacomo Valerio Iungo

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Research Interests

- Wind Energy:

- Wind turbine and wind farm wakes;
- Wind turbine wake dynamics and instabilities;
- Wind LiDAR measurements of wakes generated by utility-scale wind turbines;
- Wind tunnel testing;
- CFD and machine-learning modeling of wind farms.

- Atmospheric Boundary-Layer Turbulence:

- Characterization of the atmospheric boundary-layer through LiDAR measurements over topography, urban canyons, and at coastal regions;
- Optimal design of LiDAR scans for atmospheric-turbulence measurements;
- Production and transport of aerosol at the sea/air interface;

- Miscellaneous:

- Wing-tip vortex instabilities;
- Bluff body aerodynamics;
- Road vehicle aerodynamics;
- Signal processing and modal decomposition techniques;
- Tornado-like vortices.

Education

- 2007 Ph.D. Aerospace Engineering, Dept. Aerospace Engineering, University of Pisa, Italy. Ph.D. in collaboration with the Council for Scientific and Industrial Research (CSIR), Defence, Peace, Safety and Security Dept. (DPSS), Pretoria, Rep. of South Africa. Thesis title: "Investigation on the dynamics of wake vorticity structures and their experimental evaluation". Advisors: G. Buresti, G. Lombardi, M. Morelli, P. Skinner.
- 2003 M. Sc. Aerospace Engineering, University of Pisa, Italy; 110 Lode/110 (full honours).

Honors and Awards

- 2020 NSF CAREER Award, CBET Fluid Dynamics Program, Program Manager: Ron Joslin, title: "CAREER: Scalar Transport in High Reynolds Number Boundary Layer with Heterogeneous Roughness and Source Flux: Modeling Marine Aerosol in Coastal Regions" [link](#).
- 2010 Special mention for the prize "Best Italian junior researcher in Wind Engineering", ANIV 2010 for the biennium 2008 – 2010, 2nd July 2010, Spoleto, Italy.

Academic Experience

- September 2020-present: Associate Professor, The University of Texas at Dallas, Erik Jonsson School of Engineering & Computer Science, Mechanical Engineering Department, Wind Fluids and Experiments (WindFluX) Lab.
- September 2014-August 2020: Assistant Professor, The University of Texas at Dallas, Erik Jonsson School of Engineering & Computer Science, Mechanical Engineering Department, Wind Fluids and Experiments (WindFluX) Lab.
- July 2010-July 2014: Scientist, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland. Wind Engineering and Renewable Energy Lab (WIRE), School of Architecture, Civil and Environmental Engineering (ENAC).
- January 2007-July 2010: Post-doc, the University of Pisa, Italy, Department of Aerospace Engineering, Aerodynamics group.
- October 2005-May 2006: Visiting Scientist, Council for Scientific and Industrial Research (CSIR), Rep. of South Africa, DPSS Dept., 2m Wind Tunnel.
- October 2004-March 2005: Visiting Scientist, Council for Scientific and Industrial Research (CSIR), Rep. of South Africa, DPSS Dept., 2m Wind Tunnel.
- October 2002-May 2003: Visiting Scholar, Master Project, , Council for Scientific and Industrial Research (CSIR), Rep. of South Africa, DPSS Dept., 2m Wind Tunnel.

Teaching Experience

Fall 2016-present: UT Dallas, Mechanical Engineering Department, MECH 3315, Fluid Mechanics;
Fall 2015-present: UT Dallas, Mechanical Engineering Department, MECH 6V89, Special Topics in Thermal and Fluid Sciences: Experimental Fluid Mechanics;
Spring 2015-present: UT Dallas, Mechanical Engineering Department, MECH 4330, Intermediate Fluid Mechanics;
Spring 2011-2012: Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, Teaching Assistant: Atmospheric Boundary Layer (Instructor Prof. F. Porté-Agel);
2004-2010: The University of Pisa, Italy, Teaching Assistant: Experimental Aerodynamics; Applied Aerodynamics (Instructors: Prof. G. Buresti, Prof. G. Lombardi).

Peer Review

AIAA J., Aircraft Engineering and Aerospace Technology, Applied Energy, ASME J. Fluids Engineering, Atmosphere, Atmospheric Measurement Techniques, Boundary-Layer Meteorology, Bulletin of the American Meteorological Society, Energies, Environmental Research Letters, European J. Mechanics - B/Fluids, Fluids, J. Aircraft, J. Atmospheric and Oceanic Technology, J. Applied Meteorology and Climatology, J. Fluid Mechanics, J. Fluids and Structures, J. Fluids Engineering, J. Renew. Sustain. Energy, J. Turbulence, J. Wind and Engineering and Industrial Aerodynamics, Measurement Science and Technology, Physical Review Fluids, Proceedings of the National Academy of Sciences, Remote Sensing, Renewable Energy, Sustainability, Sustainable Energy Technologies and Assessments, Wind Energy, Wind Energy Science.

Memberships

The American Institute of Aeronautics and Astronautics; American Physical Society: Division of Fluid Dynamics & Division of Computational Physics; American Geophysical Union.

Conference Presentations

January 2021	AIAA SciTech, Wind Energy Symposium, virtual
December 2020	American Geophysical Union Fall Meeting, online
November 2020	73 th Annual meeting of the APS Division of Fluid Dynamics, virtual (link1 ; link2 ; link3)
September 2020	The Science of Making Torque from Wind (TORQUE), virtual
December 2019	American Geophysical Union Fall Meeting, San Francisco, CA
November 2019	72 th Annual meeting of the APS Division of Fluid Dynamics, Seattle, WA
October 2019	NAWEA/WINDTECH 2019 Conference, Amhrest, MA
June 2019	Wind Energy Science Conference (WESC) 2019, Cork, IR
April 2019	Bluebonnet Symposium on Thermal-Fluid Sciences, Richardson, TX
February 2019	Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA
January 2019	AIAA SciTech, Wind Energy Symposium, San Diego, CA
December 2018	American Geophysical Union Fall Meeting, Washington, D.C.
December 2018	XIII Conference of Italian Researchers in the World, Dallas, TX
November 2018	71 th Annual meeting of the APS Division of Fluid Dynamics, Atlanta, GA
August 2018	Sandia Wind Turbine Blade Workshop, Lubbock, TX
June 2018	The Science of Making Torque from Wind (TORQUE), Milano, IT
April 2018	Bluebonnet Symposium on Thermal-Fluid Sciences, Dallas, TX
April 2018	International Offshore Wind Partnering Forum, Princeton, NJ
February 2018	Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA
January 2018	AIAA SciTech, Wind Energy Symposium, Kissimmee, FL
November 2017	70 th Annual meeting of the APS Division of Fluid Dynamics, Denver, CO
October 2017	WindTech Conference, Boulder, CO
September 2017	North American Wind Energy Academy Symposium, Ames, IA
June 2017	Wind Energy Science Conference, Lyngby, DK
April 2017	Bluebonnet Symposium on Thermal-Fluid Sciences, Dallas, TX
December 2016	AGU Fall Meeting, San Francisco, CA
November 2016	69 th Annual meeting of the APS Division of Fluid Dynamics, Portland, OR
September 2016	31 st Symposium on Naval Hydrodynamics, Monterey, CA
June 2016	EUROMECH Colloquium 576 Wind farms in complex terrains, Stockholm, SE
June 2016	18 th International Symposium for the Advancement of Boundary-Layer Remote Sensing, Varna, BG
June 2016	22 nd Symposium Boundary Layers and Turbulence, Salt Lake City, UT
June 2016	18 th Coherent Laser Radar Conference, Boulder, CO
May 2016	WINDFARMS 2016 International Colloquium on wind-power plants: Interaction, Control and Integration, Richardson, TX
January 2016	American Meteorological Society, 96 th Annual meeting, Seventh Conference on Weather, Climate, Water and the New Energy Economy, New Orleans, LA
January 2016	AIAA SciTech, Wind Energy Symposium, San Diego, CA
December 2015	AGU Fall meeting, San Francisco, CA
November 2015	68 th Annual meeting of the APS Division of Fluid Dynamics, Boston, MA
October 2015	WindTech 2015, London, ON
July 2015	Windfarms 2015, Leuven, BEL
July 2015	27 th Intern. Laser Radar Conference, New York City, NY
June 2015	Wake Conference, Visby, SWE
December 2014	AGU Fall meeting, San Francisco, CA
November 2014	67 th Annual meeting of the APS Division of Fluid Dynamics, San Francisco, CA
September 2014	EFMC10 2014 10 th European Fluid Mechanics Conference, Copenhagen, DK
June 2014	IN-VENTO 2014 XIII Conference of the Italian Association for Wind Engineering, Genova, IT
June 2014	The Science of Making Torque from Wind 2014, Lyngby, DK
June 2014	IEA Task 31 WAKEBENCH meeting, Lyngby, DK
June 2014	21 st Symposium on Boundary Layers and Turbulence, Leeds, UK
April 2014	European Geosciences Union, General Assembly, Vienna, Austria

April 2013 European Geosciences Union, General Assembly, Vienna, Austria
November 2012 UAE-Swiss Research Day, Abu Dhabi - Dubai, UAE
September 2012 12th EMS Annual Meeting, Lodz, Poland
July 2012 20th Symposium on Boundary Layers and Turbulence, Boston, (MA)
May 2012 COST Action ES2012 WIRE, Workshop on Remote Sensing Measurements
for Renewable Energy, Roskilde, Denmark
April 2012 European Geosciences Union, General Assembly, Vienna, Austria
November 2011 64th Annual Meeting of the APS Division of Fluid Dynamics, Baltimore (MD)
October 2011 31st Task WAKEBENCH Kick-off meeting, Pamplona, Spain
September 2011 11th EMS Annual Meeting, Berlin, Germany
June 2010 XI Conference IN-VENTO 2010, Spoleto, Italy
September 2009 XIX Italian Conference AIMETA, Ancona, Italy
July 2009 XX Italian Conference AIDAA, Milan, Italy
July 2008 BBAA VI International Colloquium on: Bluff Bodies Aerodynamics
& Applications, Milan, Italy
June 2008 X Conference IN-VENTO 2008, Cefalu, Italy
July 2007 XIX Italian Conference AIDAA, Forli, Italy
September 2007 XVIII Italian Conference AIMETA, Brescia, Italy
June 2006 Euromech fluid mechanics conference EFMC6 KTH, Stockholm, Sweden
September 2005 XVII Italian Conference AIMETA, Florence, Italy

List of Publications

Journal Articles

1. **LiDAR measurements for an onshore wind farm: Wake variability for different incoming wind speeds and atmospheric stability regimes.** L. Zhan, S. Letizia, & G.V. Iungo; *Wind Energ.*, 23 (3), 501 – 527, 2020. [link](#)
2. **LiSBOA: LiDAR Statistical Barnes Objective Analysis for optimal design of LiDAR scans and retrieval of wind statistics. Part I: Theoretical framework.** S. Letizia, L. Zhan & G.V. Iungo; *Atmos. Meas. Tech. Discuss.*, in review, 2020. [link](#)
3. **LiSBOA: LiDAR Statistical Barnes Objective Analysis for optimal design of LiDAR scans and retrieval of wind statistics. Part II: Applications to synthetic and real LiDAR data of wind turbine wakes.** S. Letizia, L. Zhan & G.V. Iungo; *Atmos. Meas. Tech. Discuss.*, in review, 2020. [link](#)
4. **One-way mesoscale-microscale coupling for simulating a wind farm in North Texas: Assessment against SCADA and LiDAR data.** C. Santoni, E.J. García-Cartagena, U. Ciri, L. Zhan, G.V. Iungo & S. Leonardi; *Wind Energ.*, 23 (3), 691 – 710, 2020. [link](#)
5. **Spectral correction of turbulent energy damping on wind LiDAR measurements due to spatial averaging.** M. Puccioni & G.V. Iungo; *Atmos. Meas. Tech.*, 2020. [link](#)
6. **Optimal tuning of engineering wake models through lidar measurements.** L. Zhan, S. Letizia & G.V. Iungo; *Wind Energ. Sci.*, 5, 1601 – 1622, 2020. [link](#)
7. **Large-eddy simulations of oil droplet aerosol transport in the marine atmospheric boundary layer.** M. Li, Z. Zhao, Y. Pandya, G.V. Iungo & D. Yang; *Atmosphere*, 10 (8), 459, 2019. [link](#)
8. **Wandering corrections from PIV measurements of tornado-like vortices.** R. Ashton, M. Refan, G.V. Iungo & H. Hangan; *J. Wind Eng. Industr. Aerodyn.*, 189, 163 – 172, 2019. [link](#)
9. **Parabolic RANS solver for low-computational-cost simulations of wind turbine wakes.** G.V. Iungo, V. Santhanagopalan, U. Ciri, F. Viola, L. Zhan, M.A. Rotea & S. Leonardi; *Wind Energ.*, 21 (3), 184 – 197, 2018. [link](#)
10. **Performance optimization of a wind turbine column for different incoming wind turbulence V.** Santhanagopalan, M.A. Rotea & G.V. Iungo; *Renewable Energ.*, 116, Part B, 232 – 243, 2018. [link](#)
11. **Quantification of power losses due to wind turbine wake interactions through SCADA, meteorological and wind LiDAR data** S. El-Asha, L. Zhan & G.V. Iungo; *Wind Energ.*, 20 (11), 1823 – 1839, 2017. [link](#)
12. **Flow control of weakly non-parallel flows: application to trailing vortices** F. Viola, E. Pezzica, G.V. Iungo, F. Gallaire & S. Camarri; *J. Fluid Mech.*, 822, 342 – 363, 2017. [link](#)
13. **Wandering of a wing-tip vortex: Rapid scanning and correction of fixed-point measurements** G.V. Iungo; *J. Aircraft*, 54 (5), 1779 – 1790, 2017. [link](#)
14. **Assessment of virtual towers performed with scanning wind lidars and Ka-band radars during the XPIA experiment** M. Debnath, G.V. Iungo, W.A. Brewer, A. Choukulkar, R. Delgado, S. Gunter, J.K. Lundquist, J.L. Schroeder, J.M. Wilczak & D. Wolfe; *Atmos. Meas. Tech.*, 10, 1215 – 1227, 2017. [link](#)

15. **Vertical profiles of the 3D wind velocity retrieved from multiple wind LiDARs performing triple range-height-indicator scans** M. Debnath, G.V. Iungo, R. Ashton, W.A. Brewer, A. Choukulkar, R. Delgado, J.K. Lundquist, W.J. Shaw, J.M. Wilczak & D. Wolfe; *Atmos. Meas. Tech.*, 10, 431 – 444, 2017. [link](#)
16. **Evaluation of single and multiple Doppler lidar techniques to measure complex flow during the XPIA field campaign** A. Choukulkar, W.A. Brewer, S.P. Sandberg, A. Weickmann, T.A. Bonin, R.M. Hardesty, J.K. Lundquist, R. Delgado, G.V. Iungo, R. Ashton, M. Debnath, L. Bianco, J.M. Wilczak, S. Oncley & D. Wolfe; *Atmos. Meas. Tech.*, 10, 247 – 264, 2017. [link](#)
17. **Identification of Tower Wake Distortions Using Sonic Anemometer and Lidar Measurements** K. McCaffrey, P. Quelet, A. Choukulkar, J.M. Wilczak, D. Wolfe, S. Oncley, W.A. Brewer, M. Debnath, R. Ashton, G.V. Iungo & J.K. Lundquist; *Atmos. Meas. Tech.*, 10, 393 – 407, 2017. [link](#)
18. **Towards reduced order modeling for predicting dynamics of coherent vorticity structures within wind turbine wakes** M. Debnath, C. Santoni, S. Leonardi & G.V. Iungo; *Philosophical Transaction A*, 375, 20160108, 2017. [link](#)
19. **Assessing state-of-the-art capabilities for probing the atmospheric boundary layer: the XPIA field campaign** J.K. Lundquist, J.M. Wilczak, R. Ashton, L. Bianco, W.A. Brewer, A. Choukulkar, A. Clifton, M. Debnath, R. Delgado, K. Friedrich, S. Gunter, A. Hamidi, G.V. Iungo, A. Kaushik, B. Kosovic, P. Langan, A. Lass, E. Lavin, J.C.-Y. Lee, K.L. McCaffrey, R.K. Newsom, D.C. Noone, S.P. Oncley, P.T. Quelet, S.P. Sandberg, J.L. Schroeder, W.J. Shaw, L. Sparling, C. St. Martin, A. St. Pe, E. Strobach, K. Tay, B. J. Vanderwende, A. Weickmann, D. Wolfe & R. Worsnop; *Bull. Amer. Meteorol. Soc.*, 2017. [link](#)
20. **Parametric Study of Urban-Like Topographic Statistical Moments Relevant to a Priori Modelling of Bulk Aerodynamic Parameters** X. Zhu; G.V. Iungo, S. Leonardi & W. Anderson; *Bound.-Layer Meteorol.*, 162(2), 231 – 253, 2017. [link](#)
21. **Hub vortex instability within wind turbine wakes: Effects of wind turbulence, loading conditions and blade aerodynamics** R. Ashton, F. Viola, S. Camarri, F. Gallaire & G.V. Iungo; *Phys. Rev. Fluids*, 1, 063701, 2016. [link](#)
22. **Experimental characterization of wind turbine wakes: wind tunnel tests and wind LiDAR measurements** G.V. Iungo; *J. Wind Eng. Industr. Aerodyn.*, 149, 35 – 39, 2016. [link](#)
23. **Volumetric lidar scanning of wind turbine wakes under convective and neutral atmospheric stability regimes.** G.V. Iungo & F. Porté-Agel; *J. Atmos. Ocean. Tech.*, 31 (10), 2035 – 2048, 2014. [link](#)
24. **3D turbulence measurements using three synchronous wind lidars: validation against sonic anemometry.** F. Carbajo Fuertes, G.V. Iungo & F. Porté-Agel; *J. Atmos. Ocean. Tech.*, 31 (7), 1549 – 1556, 2014. [link](#)
25. **Prediction of the hub vortex instability in a wind turbine wake: stability analysis with eddy-viscosity models calibrated on wind tunnel data.** F. Viola, G.V. Iungo, S. Camarri, F. Porté-Agel & F. Gallaire; *J. Fluid Mech.*, 750, R1, 2014. [link](#)
26. **Linear stability analysis of wind turbine wakes performed on wind tunnel measurements.** G.V. Iungo, F. Viola, S. Camarri, F. Porté-Agel & F. Gallaire; *J. Fluid Mech.*, 737, 499 – 526, 2013. [link](#)
27. **Measurement procedures for characterization of wind turbine wakes with scanning Doppler wind LiDARs.** G.V. Iungo & F. Porté-Agel; *Advances in Science and Research*, 10, 71 – 75, 2013. [link](#)
28. **Field measurements of wind turbine wakes with LiDARs.** G.V. Iungo, Y-T. Wu & F. Porté-Agel; *J. Atmos. Ocean. Technol.*, 30, 274-287, 2013. [link](#)

29. **Experimental investigation on the aerodynamic loads and wake flow features of a low aspect-ratio circular cylinder.** G.V. Iungo, L.M. Pii & G. Buresti; *J. Fluids Struct.*, 28, 279 – 291, 2012. [link](#)
30. **A procedure based on proper orthogonal decomposition for time-frequency analysis of time series.** G.V. Iungo & E. Lombardi; *Exp. Fluids*, 51 (4), 969-985, 2011. [link](#)
31. **Time-frequency analysis of the dynamics of different vorticity structures generated from a finite-length triangular prism.** G.V. Iungo & E. Lombardi; *J. Wind Eng. Industr. Aerodyn.*, invited paper, 99 (6-7), 711-717, 2011. [link](#)
32. **Experimental investigation on the connection between flow fluctuations and vorticity dynamics in the near wake of a triangular prism placed vertically on a plane.** G. Buresti & G.V. Iungo; *J. Wind Eng. Industr. Aerodyn.*, 98 (6-7), 253-262, 2010. [link](#)
33. **Experimental investigation on the aerodynamic loads and wake flow features of low aspect-ratio triangular prisms at different wind directions.** G.V. Iungo & G. Buresti; *J. Fluids Struct.*, 25 (7), 1119-1135, 2009. [link](#)
34. **Correction of wandering smoothing effects on static measurements of a wing-tip vortex.** G.V. Iungo, P. Skinner & G. Buresti; *Exp. Fluids*, 46, 435-452, 2009. [link](#)

Proceedings

35. **Active aerodynamic load control for improved wind turbine design.** D. T. Griffith, N. E. Fine, J.A. Cooney, M.A. Rotea & G.V. Iungo; *J. Phys.: Conf. Ser.*, 1618, 052079, 2020. [link](#)
36. **Wind LiDAR Measurements of Wind Turbine Wakes Evolving over Flat and Complex Terrains: Ensemble Statistics of the Velocity Field.** L. Zhan, S. Letizia, & G.V. Iungo; *J. Phys.: Conf. Ser.*, 1452, 012077, 2020. [link](#)
37. **Wake Characterization of a Multipurpose Scaled Wind Turbine Model.** E. Nanos, J. Robke, F. Heckmeier, K. Jones, M. Cerny, G.V. Iungo & C.L. Bottasso; in *AIAA WindTech 2019, Wind Energy Symposium*, San Diego, CA, January 7 – 11, 2019, AIAA 2019 – 2082, 2019. [link](#)
38. **Quantification of the axial induction exerted by utility-scale wind turbines by coupling LiDAR measurements and RANS simulations.** G.V. Iungo, S. Letizia & L. Zhan; *J. Phys.: Conf. Ser.*, 1037 (7), 072023, 2018. [link](#)
39. **Coupling of mesoscale Weather Research and Forecasting model to a high fidelity large eddy simulation.** C. Santoni, E.J. García-Cartagena, U. Ciri, G.V. Iungo & S. Leonardi; *J. Phys.: Conf. Ser.*, 1037, 062010, 2018. [link](#)
40. **Profitability optimization of a wind power plant performed through different optimization algorithms and a data-driven RANS solver.** V. Santhanagopalan, S. Letizia, L. Zhan, L.Y. Al-Hamidi & G.V. Iungo; in *AIAA WindTech 2018, Wind Energy Symposium*, Kisseemee, Fl, January 8 – 12, 2018. [link](#)
41. **Reduced order model for optimization of power production from a wind farm.** G.V. Iungo, F. Viola, U. Ciri, S. Leonardi & M.A. Rotea; in *AIAA WindTech 2016, Wind Energy Symposium*, San Diego, CA, January 4 – 8, 2016. [link](#)
42. **Turbulent drag reduction over super-hydrophobic and liquid infused surfaces: dependence on the dynamics of the interface.** I. Arenas, M. Bernardini, G.V. Iungo, & S. Leonardi; in *1st Symp. Naval Hydrodyn.*, Monterey, CA, September 11 – 16, 2016.

43. **Data-driven Reduced Order Model for prediction of wind turbine wakes** G.V. Iungo, C. Santoni, M. Abkar, F. Porté-Agel, M.A. Rotea & S. Leonardi; *J. Phys.: Conf. Ser.*, 625 , 012009, 2015. [link](#)
44. **Data-driven RANS for simulations of large wind farms.** G.V. Iungo, F. Viola, U. Ciri, M.A. Rotea & S. Leonardi; *J. Phys.: Conf. Ser.*, 625 , 012025, 2015. [link](#)
45. **Effects of incoming wind condition and wind turbine aerodynamics on the hub vortex instability.** R. Ashton, F. Viola, F. Gallaire & G.V. Iungo; *J. Phys.: Conf. Ser.*, 625 , 012033, 2015. [link](#)
46. **Instability of wind turbine wakes immersed in the atmospheric boundary layer.** F. Viola, G.V. Iungo, S. Camarri, F. Porté-Agel & F. Gallaire; *J. Phys.: Conf. Ser.*, 625 , 012034, 2015. [link](#)
47. **Effects of the subgrid-scale modeling in the large-eddy simulations of wind turbines and wind farms.** U. Ciri, K. Carasquillo, C. Santoni, G.V. Iungo, M.V. Salvetti & S. Leonardi; in *Workshop direct and large-eddy simulations 10*, Limassol, Cyprus, May 27 – 29, 2015.
48. **Volumetric scans of wind turbine wakes performed with three simultaneous wind lidars under different atmospheric stability regimes.** G.V. Iungo & F. Porté-Agel; *JoP Conf. Series*, 524 , 012164, 2014. [link](#)
49. **Experimental characterization of wind turbine wakes: wind lidar measurements and wind tunnel tests.** G.V. Iungo, F. Viola & F. Porté-Agel; in *Proc. of XIII Conference of the Italian Association for wind Engineering IN-VENTO-2014*, Genova, Italy, June 22 – 25, 2014.
50. **Time-frequency analysis of the dynamics of different vorticity structures generated from a finite-length triangular prism.** G.V. Iungo & E. Lombardi; in *Proc. of XXI Congresso INVENTO-2010*, Spoleto, Italy, 30th June-3rd July 2010.
51. **Experimental investigation on the influence of wind direction on the aerodynamic loads acting on low aspect-ratio triangular prisms.** G.V. Iungo & G. Buresti; in *Proc. of XIX Congresso Nazionale AIMETA*, Ancona, Italy, 14th-17th September 2009.
52. **Experimental investigation on the aerodynamic loads and wake flow features of a low aspect-ratio circular cylinder.** G.V. Iungo & G. Buresti; in *Proc. of XX Congresso Nazionale AIDAA*, Milano, Italy, 29th June-3rd July 2009.
53. **Flow fluctuations and vorticity dynamics in the near wake of a triangular prism in cross-flow.** G. Buresti & G.V. Iungo; in *Proc. of BBAA VI International colloquium on: Bluff Bodies Aerodynamics & Applications*, Milano, Italy, 20th-24th July 2008.
54. **Experimental evaluation of the mean and fluctuating forces on triangular prisms in cross-flow.** G.V. Iungo, G. Buresti & G. Lombardi; in *Proc. of X Convegno Nazionale di Ingegneria del Vento IN-VENTO*, Cefalu, Italy, 8th-11th June 2008.
55. **Experimental evaluation of the mean and fluctuating forces on triangular prisms in cross-flow.** G.V. Iungo & P. Skinner, in *Proc. of XIX Congresso Nazionale AIDAA*, Forli, Italy, 17th-21st September 2007.
56. **Experimental evidence of the connection between flow fluctuations and dynamics of vorticity structures in the wake of a triangular prism.** G. Buresti & G.V. Iungo; in *Proc. of XVIII Congresso Nazionale AIMETA*, Brescia, Italy, 11th-14th September 2007.
57. **Wandering Smoothing Effects on Wing-tip Vortex Eulerian Measurements.** G.V. Iungo & P. Skinner; in *Proc. of Aerodays 2006 Conference*, Wien, Austria, June 2006.
58. **Characterization of the velocity fluctuations in the wake of a triangular prism of moderate aspect ratio.** G. Buresti & G.V. Iungo; in *Proc. of AIMETA Conference*, Florence, Italy, September 2005.

Other Publications and Technical Reports

59. **A procedure based on proper orthogonal decomposition for time-frequency analysis of time-series.** G.V. Iungo & E. Lombardi; *Technical Report of the Aerospace Engineer Department, University of Pisa, ADIAA 2010 – 2, April 2010.*
60. **Flow characterization of the new Dallara wind tunnel** G.V. Iungo & G. Lombardi; (in Italian) *Technical Report of the Aerospace Engineer Department, University of Pisa, DDIAA 2008 – 3, 2008.*
61. **Methods for drag reduction of bluff bodies and their application to heavy road-vehicles.** G. Buresti, G.V. Iungo & G. Lombardi; *Technical Report of the Aerospace Engineer Department, University of Pisa, DDIAA 2007 – 6, October 2007.*
62. **Wing-tip vortex wandering: comparison between pressure probe rapid scanning and hot film static measurements.** G.V. Iungo, P. Skinner & G. Buresti; *Technical Report of the Aerospace Engineer Department, University of Pisa, ADIAA 2007 – 5, September 2007.*
63. **Investigation on the dynamics of wake vorticity structures and their experimental evaluation.** G.V. Iungo; *Ph.D. thesis of the Aerospace Engineer Department, University of Pisa, 2007.*
64. **Experimental investigation on the wake generated from a low aspect-ratio triangular prism in cross-flow.** G.V. Iungo & G. Buresti; *Technical Report of the Aerospace Engineer Department, University of Pisa, ADIAA 2007 – 4, June 2007.*
65. **Correction of wandering effects on static measurements of a wing-tip vortex.** G.V. Iungo & P. Skinner; *Technical Report of the Aerospace Engineer Department, University of Pisa, ADIAA 2007 – 2, April 2007.*