

# CURRICULUM VITAE

EUROPEAN FORMAT

## PERSONAL INFORMATION

Name, Surname	CARISSIMO Bertrand
City, country	Carrieres sur Seine, France
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E-mail	<b>bertrand.carissimo@enpc.fr</b>
Website	<a href="https://www.cerea-lab.fr">https://www.cerea-lab.fr</a>
Nationality	<b>French</b>
Place and Date of birth	<b>17/04/1959 Paris</b>

## WORK EXPERIENCE

Dates (from – to)	2004-present
Name and address of employer	CEREA (Centre d'Enseignement et de Recherche en Environnement Atmospherique) Ecole des Ponts et Chaussees 6-8 avenue Blaise Pascal, Cité Descartes Champs-sur-Marne 77455 Marne la Vallée
Type of business or sector	French Engineering School
Occupation or position held	Associate Professor, Head of local scale atmospheric team
Main activities and responsibilities	Atmospheric local scale numerical modeling for environmental and renewable energy applications. Urban meteorological modeling
Dates (from – to)	2002-present
Name and address of employer	Electricite de France, Research and Development Division, 6 quai Watier, 78400 Chatou, France
Type of business or sector	Electricity company
Occupation or position held	Senior scientist
Main activities and responsibilities	Atmospheric local scale numerical modeling for environmental and renewable energy applications. Field experiments
Dates (from – to)	8/2000-8/2001
Name and address of employer	George Mason University, USA (CHARM group : Coordinated Hazardous Atmospheric Release Modeling)
Type of business or sector	University
Occupation or position held	Visiting Scientist
Main activities and responsibilities	Atmospheric dispersion modeling and field experiments
Dates (from – to)	3/1988-7/2000

Name and address of employer Electricite de France, Research and Development Division, 6 quai Watier, 78400 Chatou, France  
Type of business or sector Electricity company  
Occupation or position held Scientist  
Main activities and responsibilities Atmospheric local scale numerical modeling for environmental and renewable energy applications. Field experiments

Dates (from – to) 7/1987- 3/1988

Name and address of employer CERFACS (Centre Européen de Recherche et de Formation Avancée en Calcul Scientifique)  
Toulouse, France  
Type of business or sector Research center  
Occupation or position held Post-doc  
Main activities and responsibilities 2D turbulence modeling, preparation of PYREX field experiment

Dates (from – to) 8/1984-7/1985

Name and address of employer LMD (Laboratoire de Météorologie Dynamique)  
Type of business or sector CNRS  
Occupation or position held Military Service  
Main activities and responsibilities Two-dimensional turbulence and vortex flow modeling

## EDUCATION AND TRAINING

Dates (from – to) 8/1982 – 7/1984 and 8/1985 - 7/1987

Name and type of organisation providing education and training Princeton University, Geophysical Fluid Dynamics Laboratory (NOAA)  
Principal subjects/occupational skills covered Atmospheric and Oceanic Sciences  
Title of qualification awarded MA, PhD

Dates (from – to) 9/1981 - 6/1982

Name and type of organisation providing education and training University of Cambridge (Department of Applied Mathematics and Theoretical Physics)  
Principal subjects/occupational skills covered Fluid Mechanics – Applied Mathematics  
Title of qualification awarded Master of Advanced Study (MASt)

Dates (from – to) 9/1979-6/1981

Name and type of organisation providing education and training Ecole d'Hydraulique de Grenoble  
Principal subjects/occupational skills covered Fluid Mechanics – Continuum Mechanics  
Title of qualification awarded Ingenieur, Maîtrise

## RESEARCH ACTIVITIES

Research sectors Applied meteorology, Atmospheric Environment, high performance computing with numerical fluid mechanics

Recent Scientific Activities. Urban Neighborhood very fine resolution simulations  
Industrial site accidental atmospheric release simulations  
Wind energy potential simulations in complex terrain

**ADDITIONAL INFORMATION** 2002 : Habilitation à Diriger les Recherches (HDR)

## Books and Articles

Last five years :

Chahine, A., E. Dupont, L. Musson-Genon, C. Legorgeu, B. Carissimo **Long term modelling of the dynamical atmospheric flows over SIRTAsite**, *J. Wind Eng. Ind. Aerod.* 172, 351-366 (2018) [ doi:10.1016/j.jweia.2017.09.004 ]

Gao, Z., R. Bresson, Y. Qu, M. Milliez, C. Demunck, B. Carissimo **High resolution unsteady RANS simulation of wind, thermal effects and pollution dispersion for studying urban renewal scenarios in a neighborhood of Toulouse**, *Urban Climate* 23, 114-130 (2018) [ doi:10.1016/j.uclim.2016.11.002]

Makké, L., L. Musson-Genon, P. Plion, B. Carissimo, M. Milliez, A. Douce **A new method for fast computation of three-dimensional atmospheric infrared radiative transfer in non scattering medium: Studying fog formation** *J. Atmos. Sci.* 73, 4137-4149 (2016) [ doi:10.1175/JAS-D-15-0012.1]

Wei, X., E. Dupont, E. Gilbert, L. Musson-Genon, B. Carissimo. **Experimental and numerical study of wind and turbulence in a near-field dispersion campaign at an inhomogeneous site** *Boundary-Layer Meteorol.* 160, 475-499 (2016) [ doi:10.1007/s10546-016-0148-7]

Chahine, A., P. Matharan, D. Wendum, L. Musson-Genon, R. Bresson, B. Carissimo. **Modelling atmospheric effects on performance and plume dispersal from natural draft wet cooling towers** *J. Wind Eng. Ind. Aerodyn.* 136, 151-164, doi.org/10.1016/j.jweia.2014.11.007 (2015)

Zhang, X., L. Musson-Genon, B. Carissimo, E. Dupont, M. Milliez **On the influence of a simple microphysics parameterization on radiation fog modeling : a case study during ParisFog** *Boundary Layer Meteorol.* 151, 293-315 (2014), doi:10.1007/s10546-013-9894-y (2014)

Wei, X., E. Dupont, B. Carissimo, E. Gilbert, L. Musson-Genon. **A preliminary analysis of measurements from a near-field pollutants dispersion campaign in a stratified surface layer** *Int. J. Environ. Pollut.* 55, 184-191 (2014), doi:10.1504/IJEP.2014.065923 (2014)

Mouzourides, P., A. Kyprianou, M.J. Brown, B. Carissimo, R. Choudhary, M. K.-A. Neophytou. **Searching for the distinctive signature of a city in atmospheric modeling: Could the Multi-Resolution Analysis (MRA) provide the DNA of a city?** *Urban Climate* 10, 447-475 (2014), doi:10.1016/j.uclim.2014.04.001

Zaïdi, H., É. Dupont, M. Milliez, B. Carissimo, L. Musson-Genon. **Numerical simulations of the microscale heterogeneities of turbulence observed on a complex site** *Boundary-Layer Meteorol.*, 147, 237-259, doi:10.1007/s10546-012-9783-9 (2013)

