CV

PROF. ENRICO FERRERO

June 22, 2020

1 Personal informations

- Enrico Ferrero
  Born in Torino (Italy), 6 marzo 1961

- WORK ADDRESS:
  Università del Piemonte Orientale "A. Avogadro"
  Dipartimento di Scienze e Tecnologie Avanzate
  viale Teresa Michel 11, 15121, Alessandria, Italia
  tel. +39-0131-360151
  fax. +39-0131-360199
  E-MAIL: enrico.ferrero@unipmn.it

- HOME ADDRESS:
  Via Napione 32, 10124, Torino, Italia
  tel. +39-011-837932

2 Academic qualifications

- 1988 Degree in Physics University of Torino.
- 1988-1989 grant from CSI Piemonte
- 1990-1993 PhD in Geophysics, University of Genova
- 1993-1998 Assistent Researcher of General Physics at the University of Torino in Alessandria (Italy)
- 1998-2006 Assistent Researcher of General Physics and later on of Experimental Physics at the Piemonte Orientale University in Alessandria
- 2006-2016 Associate Professor of Experimental Physics at the University of Piemonte Orientale in Alessandria
- 2016-present Associate Professor of Physics of the Earth System and the circumterrestrial medium at the University of Piemonte Orientale in Alessandria
- 2012 ASN National Scientific Qualification as Full Professor in Atmospheric Physics and Oceanography SC 04A4 Geophysics (SSD GEO/12)
- 2016 ASN National Scientific Qualification as Full Professor in Physics of the Earth System and the circumterrestrial medium (SSD FIS/06) SC 02C1 Astronomy, Astrophysics, Earth and Planetary Physics

2.1 Other qualifications

- Organisation of the Master "Nuove Frontiere della Fisica" University of Pienmonte Orientale
- Teaching at Master in Meteorology, University of Torino
- Member of "Senato Accademico integrato" University of Piemonte Orientale
- Teaching at TFA (Teaching qualification course)
- Referee for GEV02 of VQR 2005-2010
- 2000-2012 Member of the "Centro Interdisciplinare per lo Studio e la Conservazione dei Beni Culturali" at University of Piemonte Orientale.
- until 2015 Member of the teaching board of the PhD in Environmental Sciences at the University of Piemonte Orientale.
- 2013-2014 Participation to the COST action ES1002 WIRE
- Member of the Editorial Board of the international journal *Advanced in Meteorology*
- 2016-present Member of the teaching board of the PhD in Aerospace Engineering of the Politecnico di Torino (SCUDO)
- Associate Researcher at the National Research Council, Institute for Atmospheric Science and Climate, in Torino
- Member and Department Representative of Interdepartmental Center "UPO4Sustainability"
- Member of the RUS (Sustainable University Network) team of University of Piemonte Orientale and Representative for the Climate Change working group

3 Scientific skills and competences

- Atmospheric Physics
- Boundary Layer Meteorology
- Atmospheric Turbulence
- Pollutant dispersion modelling
- Physical modelling

3.1 Visiting

- 2015 Visiting Scientist (Invited) at National Center for Atmospheric Research (NCAR), USA, August-September
- 2016 Visiting Scientist (Invited) at National Center for Atmospheric Research (NCAR), USA, August-September
- 2017 Visiting Scientist (Invited) at National Center for Atmospheric Research (NCAR), USA, May-June
- 2018 Visiting Scientist (Invited) at National Center for Atmospheric Research (NCAR), USA, May-June
- 2019 Visiting Scientist (Invited) at National Center for Atmospheric Research (NCAR), USA, May-June

3.2 Reviewer assignments (Journals)

- Journal of Applied Meteorology (American Meteorological Society)
- Atmospheric Environment (Elsevier Science)
- Boundary-Layer Meteorology
- Journal of Wind Engineering & Industrial Aerodynamics (Elsevier Science)
- Environmental Modelling and Software (Elsevier Science)
- Il Nuovo Cimento C
- Physica A
- Atmosphere

3.3 Reviewer assignments (Projects proposals)

- Israel Foundation
- FWF Austria

3.4 Main scientific collaborations

International:

NASA GISS e Columbia University (New York), Prof. V. Canuto

Laboratoire Coriolis-LEGI, CNRS, (Grenoble), Dr. J. Sommeria

George Mason University, (Washington), Dr. P. Franzese

Universidade Federal de Santa Maria (RS), Brasil, Prof. G. Degrazia

College of Earth, Ocean & Environment, University of Delaware, USA, Prof. Pablo Huq

NCAR, USA, Dr. Stefano Alessandrini

Ecole Central de Lion, Dr. Pietro Salizzoni

Israel Institute for Biological Research, Ness-Ziona, Israel, Alon Manor

Air Quality Control, Government of Styria, Austria, Dietmar Oettl

Italian:

Dipartimento Fisica Generale, Università di Torino

ISAC-CNR, Sez. Torino

ISAC-CNR, Sez. Lecce, Dr. U. Rizza

RSE, Milano, Dr. G. Pirovano

Dipartimento di Matematica, Università di Torino, Prof. P. Cermelli

3.5 Invited Lectures

- 2005: "The Brownian motion", Einstein day, Faculty of Science, University of Piemonte Orientale
- 2009 IV ARPA National Congress on "Controllo ambientale degli agenti fisici: nuove prospettive e problematiche emergenti", Vercelli, 24-27 marzo 2009, "Turbolenza e modelli di dispersione degli inquinanti in aria: fondamenti fisici e teorici"
- 2009 VI Brazilian Workshop on Micrometeorology, 18-20 November 2009, Santa Maria, RS, Brasile, "Turbulence non-local closure models"
- 2012 Università degli Studi di Napoli "Federico II", Aprile 2012, IL RUOLO DELLA METEOROLOGIA NEI MODELLI FOTOCHIMICI ATMOSFERICI
- 2013 COST Action ES1002: WG3-DLR meeting in Prague March 5th-6th, "Low wind speed and turbulence for mesoscale modelling"
- 2014 University of Napoli "Federico II", 11 March 2014,"Fluidodynamical models for the mean flow and turbulence at different scales, the problem of the low-wind"
- Grenoble 18-19th March 2014, Commemoration Grabriel Chabert d'Hieres and prospective for the new Coriolis platform, *Simulation of atmospheric microbursts in rotating tank*

- 2014 University of Turin, Science for cultural heritage course, title: "Microclimate measurements in outdoor and indoor environment", 21 May 2014
- 2016: VI ARPA National Conference, Il controllo degli agenti fisici: ambiente, territorio e nuove tecnologie, 6, 7, 8 giugno 2016, "Modelli di dispersione degli inquinanti in atmosfera: esperienze applicative"
- V Modelling Day in ARIA(NET) 31 January 2018, "SPRAY- WEB 1.0 Un community model Lagrangiano per la ricerca"

3.6 Research projects as Principal investigator

- 2001 - "Joint Study on Atmospheric Dispersion Modeling" contract between ICG-CNR and Mitsubishi Heavy Industries Ltd (Nagasaki, Giappone).
- 2002-2003 - "Mesoscale and local air-sea interaction processes studied through radiometric, backscatter satellite data and atmospheric model" project funded by Space Italian Agency.
- 2004 - "Development and interface of the meteorological code RAMS and the diffusion Model SPRAY", contract between CESI and Dipartimento di Scienze e Tecnologie Avanzate.
- 2004 - "Verifica tramite simulazioni in situazioni di atmosfera della nuova versione 3.0 del modello di interfaccia MIRS fra il codice RAMS (versione 4.4) e SPRAY", research contract between CESI and Dipartimento di Scienze e Tecnologie Avanzate.
- 2004 - "Sviluppo di modelli numerici avanzati per lo studio dell'inquinamento atmosferico", PhD fellowship funded by Regione Piemonte.
- 2004 - , "Development of turbulence models", PhD fellowship funded by Fondazione CRT, Progetto Lagrange on complex systems.
- 2004 - "Sviluppo di modelli Lagrangiani per inquinanti reattivi e introduzione di algoritmi per la deposizione secca ed umida", fellowship funded by CESI.
- 2005 - "Sviluppo di modelli Lagrangiani per inquinanti reattivi e introduzione di algoritmi per la deposizione secca ed umida", research contract between CESI and Dipartimento di Scienze e Tecnologie Avanzate.
- 2004-2005 - Project funded by Associazione Ambiente Territorio e Formazione (Provincia di Alessandria) for the photochemical pollution model development.
- 2005 - "Studio modellistico e sperimentale della turbolenza atmosferica e della dispersione di inquinanti in ambiente urbano" project funded by Regione Piemonte.

- 2005 - "Simulazione numerica e in vasca rotante in similitudine di processi di dispersione e trasporto a scale comprensoriale di inquinanti atmosferici", project funded by Regione Piemonte.
- 2006 - "Modellizzazione su scala regionale della dinamica della chimica del particolato atmosferico", project funded by Regione Piemonte.
- 2009 - "Large eddy simulations of atmospheric and oceanic turbulent flows", fellowship for foreign students, co-funded by Regione Piemonte.
- 2009 - "Implementazione di nuove funzionalitá degli algoritmi adatti a trattare le problematiche del processo fisico-chimico relativo alla trasformazione chimica degli inquinanti atmosferici, in un modello di dispersione lagrangiano", research contract between ERSE and Dipartimento di Scienze e Tecnologie Avanzate.
- 2010 - "Sviluppo del codice di dispersione lagrangiano SPRAY", research contract between ERSE and Dipartimento di Scienze e Tecnologie Avanzate.
- 2011 - PEA2008 PNRA (Antarctic Research National Program - Annual Executive Program), POLYNOM Project
- 2012 - "SVILUPPO DEL CODICE SPRAY: Valutazione dell'impatto sulla qualità dell'aria della diffusione del veicolo elettrico in prossimità di un'arteria stradale di traffico intenso", research contract, RSE - University of Piemonte Orientale
- 2013 - "REALIZZAZIONE DELLA VERSIONE PUBBLICA DEL CODICE SPRAY", research contract, RSE - University of Piemonte Orientale
- 2014 - Research Contract CESI-UPO: "Collaborazione per applicazione modellistica di dispersione atmosferica"
- 2015-2017 "Stima del rischio dovuto a fenomeni atmosferici intensi in presenza di convezione termica" funded by CRT foundation (competitive call).
- 2015-2016 IsC44 NMTFEPRA Cineca HPC projects (PI)
- 2016-2018 Call for university research, University of Piemonte Orientale (PI) "Integrated system for the fibre pollution assessment in air and characterization of the fibrous phases in different matrixes"
- 2017-2018 IsC44 TNMRA01 Cineca HPC projects (PI)
- 2017-2018 Research contract NTTDATA-UPO on "Big-data and Advanced Analytics"

- 2019 Research contract with ARPA Piemonte for the organisation of the Conference "A 25 anni dall'alluvione del Piemonte 1994, i progressi fatti nella previsione degli eventi estremi e quanto resta ancora da fare"
- 2019 Funding from CRAL foundation for the conference "A 25 anni dall'alluvione del Piemonte 1994, i progressi fatti nella previsione degli eventi estremi e quanto resta ancora da fare"
- 2019 Funding from AMAG for the conference "A 25 anni dall'alluvione del Piemonte 1994, i progressi fatti nella previsione degli eventi estremi e quanto resta ancora da fare"

3.7 Other research projects

- PNRA (Antarctic Research National Program) 2000-2002, Atmospheric Physics and Chemistry: " Chemical and physical evolution of the atmospheric compound in the troposphere: air mass trajectories in the Antarctic troposphere"
- 2002 - Access to major research infrastructures, grande plateforme tournante de Grenoble, Coriolis "Governing parameters for the equation of turbulent diffusion in the PBL of a rotating flow"
- 2005 - INTERREG III B Alpine Space Program, Project: "Monitoring and Minimisation of Traffic-Induced Noise and Air Pollution Along Major Alpine Transport Routes"
- 2015-2016 IsC37_HPCEFM1 Cineca HPC projects
- 2013-2017 Euhit Project, European High-Performance Infrastructures in Turbulence, supported by the European Community Framework Programme 7

3.8 Conferences, lectures, events organisation

- One day on complexity University of Piemonte Orientale, DISTA, Alessandria (Italy) 22/02/2006
- TurLab workshop, University of Torino, Dep. of Physics, Torino (Italy), 17/11/2010
- 2017 Member of the scientific committee of 18th International Conference on the Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes Bologna, Italy, 9-12 October, 2017
- 2018 Member of the Scientific Organising Committee of AISAM (Italian Association of Atmospheric Sciences and Meteorology) First national conference (AISAM-CN1), Bologna, 10-13 Settembre 2018

- 2018-2019 Member of the organising local committee for the ETC17 (European Turbulence Conference), September 2019
- 2019 Organisation (Local and Scientific committees chair) of the conference "A 25 anni dall'alluvione del Piemonte 1994, i progressi fatti nella previsione degli eventi estremi e quanto resta ancora da fare" 6 November 2019 (https://www.ecmwf.int/en/newsletter/162/news/1994-piedmont-flood-revisited)

4 Academic activity and tutoring

4.1 Courses

- General Physics
- General Physics Laboratory
- Physics of fluid
- Environmental Physics
- Statistics and error theory
- Meteorology and Pollutant Dispersion
- Microclimate for cultural heritage
- Turbulence and Dispersion
- Fluid dynamics laboratory
- Stochastic processes
- Computational statistics

4.2 Tutor of Master degree thesis

- 1996-1997, "Esperimenti numerici su casi reali ed ideali di interazione flusso ostacolo in ambiente rotante", N.Loglisci, Master degree in Physics, University of Torino
- 1997-1998, "Studio Modellistico della dispersione turbolenta nello strato limite convettivo" M.Tamiazzo, Master degree in Physics, University of Piemonte Orientale
- 2000-2001, "Studio della dispersione relativa di traccianti passivi in atmosfera attraverso un modello Lagrangiano a due particelle", L.Mortarini, Master degree in Physics, University of Torino

- 2001-2002, "Modelli di chiusura della turbolenza ad ordini elevati per lo strato limite atmosferico neutro", M.Racca, Master degree in Physics, University of Torino

- 2001-2002, "Monitoraggio ambientale tramite l'uso di modelli numerici per la dispersione di inquinanti aeriformi", R. Palma, Master degree in Biology, University of Piemonte Orientale

- 2004-2005, "Studio delle chiusure della turbolenza in un modello meteorologico e loro influenza sui processi di dispersione", E. Orlandi, Master degree in Physics, University of Milano

- 2004-2005, "Modelli matematici per fluidi non newtoniani", G. Fissore, Bachelor's Degree in Physics, University of Piemonte Orientale

- 2006-2007, "Invarianti isotropi e ralzioni di chiusura nei flussi turbolenti con convezione", E. Carretto, Master degree in Mathematics, University of Torino

- 2007-2008, "Modelli per la dissipazione di energia cinetica e per i termini di pressione per flussi turbolenti"', D. Massone, Master degree in Physics, University of Piemonte Orientale

- 2007-2008, "Studio delle condizioni al contorno per un modello di dispersione stocastico", A. Bisignano, Bachelor's Degree in Physics, University of Piemonte Orientale

- 2007-2008, "Analisi e confronto dei dati meteorologici misurati della centralina della Facoltà di Scienze M.F.N.", M. Solari, Bachelor's Degree in Physics, University of Piemonte Orientale

- 2008-2009, "Modelli Lagrangiani di dispersione in atmosfera con reazioni chimiche", C. Lacagnina, Master degree in Physics, University of Torino

- 2008-2009, "Elaborazione dei campi forniti dal modello meteorologico RAMS nello studio della qualità dell'aria: confronto tra valori misurati e valori simulati", G. Soave, Bachelor's Degree in Environmental Science Ambientali, University of Piemonte Orientale

- 2010-2011 *Modello per la funzione di densità di probabilità della concentrazione di scalari passivi in turbolenza reale*, Andrea Bisignano, Master degree in Physics, University del Piemonte Orientale

- 2011-2012 *Simulazione in vasca idrodinamica di microburst atmosferici*, Mattia Solari, Master degree in Physics, University di Torino

- 2012-2013 *Valutazione modellistica dell'inquinamento atmosferico dovuto a sorgenti multiple*, Marco Soda, Bachelor's Degree in Environmental Science, University del Piemonte Orientale

- 2013-2014 *Un Modello Lagrangiano Stocastico a particella singola per lo studio delle fluttuazioni di concentrazione*, Federico Purghè, Master degree in Physics of Complex Systems, University di Torino and University of Piemonte Orientale.

- 2013-2014 *Modelling the pollutant dispersion of the Fukushima nuclear plant release,* Marco Boetti, Master degree in Physics, University of Torino

- 2014-2015 *Esperimenti di laboratorio su correnti di densit'a in rotazione*, Cristiano Barbesino, Master degree in Physics of Complex System, University of Torino and University of Piemonte Orientale

- 2015-2016 *Studio del flusso e della turbolenza in un modello di canopy urbana in ambiente rotante*, Federica Fantini, Master degree in Physics, University of Torino

- 2016-2017 *Upper atmosphere data reconstruction, based on SABER/TIMED measurements, and comparisons with MSIS model and soundings*, Francesco Ramotti, Master degree in Physics, University of Torino

- 2016-2017 *Experimental study of Zonostrophic turbulence in a rotating system over a topographic Beta-plane*, Federica Ive, Master degree in Physics, University of Torino

- 2017-2018 *Messa a punto di una metodologia per il monitoraggio della dispersione di fibre di amianto in ambiente urbano* Andrea Savoini Bachelor's Degree in Material Science, University of Piemonte Orientale

- 2017-2018 *Analisi e Confronto dei Dati Metereologici di Due Centraline Urbane* Antonina Cestaro Bachelor's Degree in Material Science, University of Piemonte Orientale

- 2019-2020 *Confronto tra due modelli si simulazione delle fluttuazioni di concentrazione* Filippo Maccarini Master degree in Physics of Complex Systems, University of Torino and University of Piemonte Orientale

4.3 Tutor of PhD students

- Dr. Luca Mortarini, "Lagrangian stochastic models for turbulent dispersion and concentration fluctuations in homogeneous and inhomogeneous turbulence", PhD, Physics, Università di Torino, XVIII Ciclo

- Dr. Nicoletta Colonna, "Higher order closure models for turbulence in the atmospheric boundary layer", PhD, Environmental Sciences, Univeristà del Piemonte Orientale, XX Ciclo

- Dr. Alessia Balanzino, "Sviluppo di una catena modellistica per lo studio dell'inquinamento secondario su un dominio a scala regionale", PhD, Environmental Sciences, Università del Piemonte Orientale, XX Ciclo

- Dr. Stefano Alessandrini, PhD, Environmental Sciences, Università del Piemonte Orientale, XXIII Ciclo

- Dr. Andrea Bisignano, PhD, Environmental Sciences, Università del Piemonte Orientale, XXVI Ciclo

5 Third mission - Public engagement

- Many years of orientation activities with seminars and exercises for high school students

- 2005: Organization of a Day on Complex Systems at the DiSTA of the University of Eastern Piedmont

- 2005: editing of an article for the University magazine "Ateneo e Citta "" (June 2005, pp. 21-23) "From the Brownian motion to the complex systems" E. Ferrero and E. Scalas.

- 2006: Participation in the Science Festival, Genoa: Collaboration in the exhibition "Tomorrow, the sensitive future" with installation of the hydrodynamic tank.

- 2006: Participation in the Science Festival, Genoa: Participation in the round table on "Energy and the environment: instructions for use"

- 2007: Collaboration with Agor in Science: SCS2007 summer school Seminars on scientific dissemination

- 2009: Organization of the Refresher Course on Climate and Energy of the Degree Course in Physics and Faculty of Science of the University of Eastern Piedmont as part of the Scientific Degrees Project

- 2006, 2007, 2008, 2009: Participation and organization of the Researcher's Night

- 2012: Participation in ITN B2B - Infrastructures and Technologies for the smart city, Turin 27 September 2012

- 2014: Agreement with the Company to Climate Consulting for the installation of a meteorological station at the DISIT headquarters

- 2015: Egyptian-Italian Workshop on Bilateral Scientific Cooperation, Morning of the 16th of June 2015 R-to-R sessions in historical cafes of Turin, Session 1: Renewable Energies and Environment.

- 2017 Researchers' Night 2017 organization of the initiative "STUDYING THE ATMOSPHERE IN THE LABORATORY"

- 2017 Researchers' Night 2017 organization of the initiative "THE IMPORTANCE OF OUR ATMOSPHERE FOR QUALITY IN THE ENVIRONMENT, FOOD AND HEALTH" seminar held by Prof. Dino Zardi, University of Trento, President of the Italian Association of Atmospheric Sciences and Meteorology.

- 2017 Organization of the Session dedicated to University Training in Meteorological Sphere at the third edition of the Festival of Meteorology

- Scientific Degrees Project 2017-2018: Activities with schools in the Hydrodynamic Laboratory

- 2017 Festival of Meteorology 2017, Rovereto 17-19 November, "The courses in meteorology in Italian Universities, instructions for use "

- 2018 WORLD METEOROLOGY DAY 2018, Rome - Friday 23 March 2018 GMM2018 - TRAINING IN ATMOSPHERIC SCIENCES, "The educational offer in Italy in atmospheric sciences"

- 2018 Interview in UPOnews "Scientific degrees: research and work for the meteorologists of the future" 11/04/2018

- 2018 Article in Extracampus "The role of meteorology in environmental sustainability"

- 2018 Researchers' Night 2018 organization of the initiative "The atmosphere in a tank looks like a game but it is not a game"

- 2018 Organization of the Session dedicated to University Training in Meteorological area at the fourth edition of the Festival of Meteorology, Rovereto

- 2019 WORLD METEOROLOGY DAY 2019, Rome - Friday 23 March 2019 GMM2019 - TRAINING IN ATMOSPHERIC SCIENCES, "The educational offer in Italy in atmospheric sciences"

• 2019 University of Piemonte Orientale scientific coordinator of Researcher Night on "Climate, Environment, Sustainability"

• 2019 September Organisation of the event "Il cortile dell'Universit in the "Aperto per Cultura" (ASCOM Alessandria)

• 2019 Lecture at "Festa Popoli 2019 ", title "The climate change", Vercelli, 8 October 2019

• 2019 November Course for high school teachers: Agenda 2030: Teaching processes for sustainable education, Goal 13: Climate change

- 2019 Festival of Meteorology 2019, Rovereto 15-17 November, "Il convegno sull?alluvione del Piemonte del 1994 e altre iniziative all'Universit del Piemonte Orientale"

- 2019 Article for the University Journal Extracampus entitled "Strategie linguistiche per i cambimenti climatici" (Ferrero E. and Napoli M.)
- 2019 Christmas Lecture: "Sant'Andrea: Rilevamento della temperatura e dell'umidità ambientale ai fini della conservazione del coro ligneo"
- 2020 Presentation of the book "La guerra calda", author Gerardo Greco, journalist and anchorman, at the Libraccio bookshop, Alessandria, 7 February 2020.
- 2020 Five lectures on Civil Protection and Environmental Sustainability, short curse for students of different degree courses

6 Publications

- WOS: h-index 16; Total citations 811.
- SCOPUS: h-index 16; Total citations 908
- Research Gate: h-index 19 ; Total citations 1078
- Google Scholar: h-index 21 ; Total citations 1467

6.1 International Journals

1. Giovannini, L.; Ferrero, E.; Karl, T.; Rotach, M.W.; Staquet, C.; Trini Castelli, S.; Zardi, D. Atmospheric Pollutant Dispersion over Complex Terrain: Challenges and Needs for Improving Air Quality Measurements and Modeling. Atmosphere 2020, 11, 646.
2. Ferrero, E.; Manor, A.; Mortarini, L.; Oettl, D. (2020) Concentration Fluctuations and Odor Dispersion in Lagrangian Models. Atmosphere , 11, 27.

   2019
3. Andrea Bisignano, Enrico Ferrero, Stefano Alessandrini (2019) A Lagrangian dispersion model with a stochastic equation for the temperature fluctuations, International Journal of Environment and Pollution, 65 (4), pp. 311-324
4. Tomasi, Elena; Giovannini, Lorenzo; Falocchi, Marco; Antonacci, Gianluca; Jimnez, Pedro A; Kosovic, Branko; Alessandrini, Stefano; Zardi, Dino; Delle Monache, Luca; Ferrero, Enrico, Turbulence parameterizations for dispersion in sub-kilometer horizontally non-homogeneous flows, Atmospheric Research, 228, 122-136, 2019, Elsevier

5. Ferrero, Enrico; Alessandrini, Stefano; Anderson, Bret; Tomasi, Elena; Jimenez, Pedro; Meech, Scott, 2019, Lagrangian simulation of smoke plume from fire and validation using ground-based lidar and aircraft measurements, Atmospheric Environment,213:659-674, Pergamon

6. Ferrero, Enrico; Oettl, Dietmar, An evaluation of a Lagrangian stochastic model for the assessment of odours, Atmospheric Environment, 206, 237-246, 2019, Pergamon

2018

7. Ferrero, Enrico; Alessandrini, Stefano; Vandenberghe, Francois, Assessment of planetary-boundary-layer schemes in the Weather Research and Forecasting model within and above an urban canopy layer, Boundary-layer meteorology, 168, 2, 289-319, 2018, Springer Netherlands

2017

8. Bisignano, Andrea; Mortarini, Luca; Ferrero, Enrico,Evaluation of high-order concentration statistics in a dispersing plume,Physica A: Statistical Mechanics and its Applications, 474, 115-126, 2017, Elsevier

9. Bisignano, Andrea; Mortarini, Luca; Ferrero, Enrico; Alessandrini, Stefano, Model chain for buoyant plume dispersion, Int J Env Poll, 62, 2, 3, 2017,

10. Amicarelli A., G. Leuzzi, P. Monti, S. Alessandrini, E. Ferrero, 2017 A stochastic Lagrangian micromixing model for the dispersion of reactive scalars in turbulent flows: role of concentration fluctuations and improvements to the conserved scalar theory under non-homogeneous conditions; Environmental Fluid Mechanics, 17, 715-753

11. Oettl, D., Ferrero, E. 2017 A simple model to assess odour hours for regulatory purposes, Atmospheric Environment, 155, 2017, Pages 162-173

12. Ferrero, E., Mortarini, L., Purghé, F., 2017, A Simple Parametrization for the Concentration Variance Dissipation in a Lagrangian Single-Particle Model, Boundary-Layer Meteorology, Volume 163, Issue 1, 1 April 2017, Pages 91-101

13. E. Ferrero, S. Alessandrini, D. Anfossi, 2017, Lagrangian simulation of plume rise in strong capping inversion, Int. J. Environ. Poll., 62, 2/3/4, 184-199

2016

14. Enrico Ferrero, Stefano Alessandrini, Alessia Balanzino, 2016, Impact of the electric vehicles on the air pollution from a highway, Applied Energy, Volume 169, Pages 450-459

2015

15. Andrea Michiorri, Huu-Minh Nguyen, Stefano Alessandrini, John Bjrnar Bremnes, Silke Dierer, Enrico Ferrero, Bjrn-Egil Nygaard, Pierre Pinson, Nikolaos Thomaidis, Sanna Uski, 2015, Forecasting for dynamic line rating, Renewable and Sustainable Energy Reviews, 52, 1713-1730

2014

16. Ferrero, E., L. Mortarini, M. Manfrin, M. Solari, and R. Forza (2014), Physical simulation of atmospheric microbursts, J. Geophys. Res. Atmos., 119, 1-14, doi:10.1002/2013JD021243.

17. Elena Costa Frola, Andrea Mazzino, Federico Cassola, Luca Mortarini, Enrico Ferrero, 2014, An Experimental Study of the Statistics of Temperature Fluctuations in the Atmospheric Boundary Layer, Boundary-Layer Meteorology, Volume 150, Issue 1, pp 91-106

18. S Trini Castelli, S Falabino, L Mortarini, E Ferrero, R Richiardone, D Anfossi, 2014, Quarterly Journal of the Royal Meteorological Society, 140, 683, 2023-2036

19. A Bisignano, L Mortarini, E Ferrero, S Alessandrini, 2014, Analytical offline approach for concentration fluctuations and higher order concentration moments, Int. J. of Environment and Pollution, Vol. 55, Nos. 1/2/3/4, pp. 58-66

2013

20. L.Mortarini, E.Ferrero S. Falabino, S. Trini Castelli, R. Richiardone and D. Anfossi, (2013) Low-frequency processes and turbulence structure in a perturbed boundary-layer, Q. J. R. Meteorol. Soc. 139: 1059 - 1072

21. E.Ferrero, L.Mortarini, S.Alessandrini and C. Lacagnina (2013) Application of a bivariate Gamma distribution for a chemically reacting plume in the atmosphere, Boundary-Layer Meteorol, 147:123-137

22. S. Alessandrini, E. Ferrero, D. Anfossi (2013) A new Lagrangian method for modelling the buoyant plume rise, Atmospheric Environment 77 (2013) 239-249

2012

23. Quan L, Ferrero E, Hu F (2012) Relating statistical moments and entropy in the stable boundary layer. PHYSICA. A, vol. 391, p. 231-247, ISSN: 0378-4371, doi: 10.1016/j.physa.2011.07.012

24. S Alessandrini, A Balanzino, E Ferrero and M Riva (2012) Lagrangian modelling evaluation of the NOx pollution reduction due to electric vehicles introduction, Int. J. Environment and Pollution, Vol. 50, Nos. 1/2/3/4, 200-208

25. E.Ferrero, L.Mortarini, S.Alessandrini and C. Lacagnina (2012) A fluctuating plume model for pollutants dispersion with chemical reactions, Int. J. Environment and Pollution, Vol. 48, Nos. 1/2/3/4, 3-12

26. A. Balanzino, G. Pirovano, E. Ferrero, M. Causá, G.M. Riva (2012) Particulate matter pollution simulations in complex terrain, Int. J. Environment and Pollution, Vol. 48, Nos. 1/2/3/4, 39-46

27. D. Ponziani, E.Ferrero, L. Appolonia and S Migliorini (2012) Effects of temperature and humidity excursions and wind exposure on the arch of Augustus in Aosta, Journal of Cultural Heritage 13 462-468

2011

28. S. Alessandrini, E. Ferrero, G. Belfiore, 2011, A Lagrangian dispersion Model with Chemical reaction, Int. J. Environ. and Pollut., Vol. 44, No.1/2/3/4 pp. 182 - 189

29. A. Balanzino, E. Ferrero, G. Pirovano, C. Pertot, M. Causà, S. Alessandrini, M.P. Costa, (2011), Annual simulation of secondary pollution over northern Italy, Int. J. Environ. and Pollut., Vol. 45, No. 4, 353-384

30. E. Ferrero, L. Quan, D. Massone, (2011), Turbulence in the stable boundary layer at higher Richardson numbers, Bound.-layer Metor., 139:225-240 DOI: 10.1007/s10546-010-9581-1

31. S.Alessandrini and E.Ferrero (2011) A Lagrangian particle model with chemical reactions: application in real atmosphere, Int. J. Environ. and Pollut., 47, (1-4), 97-107

2010

32. D. Anfossi, G. Tinarelli, S. Trini Castelli, E. Ferrero, D. Oettl, G. Degrazia, L. Mortarini, 2010 Well mixed condition verification in windy and low wind speed conditions, Int. J. Environ. and Pollut., Vol. 40, Nos. 1/2/3,

33. S. Alessandrini, E. Ferrero, C. Pertot, S. Trini Castelli and E. Orlandi, 2010, Turbulence closure in atmospheric circulation model and its influence on the dispersion, Int. J. Environ. and Pollut., Vol. 40, Nos. 1/2/3,

before 2010

34. L. Mortarini, P. Franzese and E. Ferrero (2009), A fluctuating plume model for concentration fluctuations in a plant canopy, Atmos. Environ., 43, 921-927

35. N.M. Colonna, E. Ferrero and U. Rizza (2009) Non Local Boundary Layer: the pure buoyancy driven and the buoyancy-shear driven cases, J. Geophys. Research, 114,D05102, doi:10.1029/2008JD010682.

36. E. Ferrero, N.M. Colonna, U. Rizza (2009) Non-local simulation of the stable boundary layer with a third order moments closure model, J. Mar. Syst., 77, 495-501, doi:10.1016/j.jmarsys.2008.11.013

37. Alessandrini S. and Ferrero E. (2009). A hybrid Lagrangian-Eulerian particle model for reacting pollutant dispersion in non-homogeneous non-isotropic turbulence. PHYSICA A, ISSN: 0378-4371, 388, 8, 1375-1387

38. E. Ferrero, L. Mortarini, M. Manfrin, A. Longhetto, R. Genovese and Renato Forza (2009), Boundary-Layer Stress Instabilities in Neutral, Rotating Turbulent Flows, Boundary-Layer Meteorol., 130:347-363, DOI 10.1007/s10546-009-9353-y

39. Quan LH, Longhetto A, Ferrero E (2009) The characteristics of low-speed streaks in near-neutral and unstable atmospheric boundary layer, Nuovo Cimento della Societa Italiana di Fisica B-General Physics Relativity Astronomy and Mathematical Physics and Methods ,Vol. 124, 3, 325–340

40. E. Ferrero, R. Genovese, A. Longhetto, M. Manfrin and L. Mortarini, (2008), Experimental study of higher-order moments in shear-driven boundary layers with rotation, Journal of Fluid Mechanics, Volume 598, March , pp 121-139

41. Anfossi D., Alessandrini S., Trini Castelli S., Ferrero E., Oettl D., Degrazia G., 2006, Tracer dispersion simulation in low wind speed conditions with a new 2D Langevin equation system, Atmos. Environ. 40 (37), 7234-7245

42. Ferrero E. and Colonna N., 2006, Nonlocal treatment of the buoyancy-shear-driven boundary layer J. Atmos. Sci., 63 (10), 2653-2662

43. Balanzino A. and Ferrero E., 2006, Modelling system for photochemical pollution in Northern Italy. Nuovo Cimento B, 121, 8,857–866

44. Trini Castelli S., Ferrero E., Anfossi D. and R. Ohba, 2005, Turbulence closure models and their application in RAMS, Env. Fluid Mech., 5, 169-192

45. Ferrero E. and Mortarini L., 2005, Concentration fluctuations and relative dispersion PDF, Atmospheric Environment, 39, 11, 2135-2143

46. Alessandrini S, E Ferrero, S Trini Castelli and D Anfossi, 2005, Influence of turbulent closure on the simulation of flow and dispersion in complex terrain, Int. Jour. of Environment and Pollution, Vol. 24, N. 1-4, 154 - 170

47. Ferrero E., A. Longhetto, L. Montabone, L. Mortarini, M. Manfrin, J. Sommeria, H. Didelle, C. Giraud and U. Rizza, 2005, Physical simulations of neutral boundary layer in rotating tank, Il Nuovo Cimento C, vol. 28 C, N. 1, 1-17

48. Mortarini L. and Ferrero E., 2005, A Lagrangian Stochastic Model for concentration fluctuations, Atmos. Chem. Phys., 5, 2539-2545

49. Alessandrini S, E Ferrero, C. Pertot, E Orlandi, 2005 Comparison of different dispersion models with tracer experiment, Il Nuovo Cimento C, vol. 28 C, N. 2, 141-149

50. Ferrero E., 2005, Third order moments for shear driven boundary layer, Bound.-Layer Meteo., 116, 3, 461-466

51. Ferrero E. and M. Racca, 2004, The role of the non-local transport in modelling the shear driven atmospheric boundary layer, J. Atmos. Sci, 60, 12, 1434–1445

52. E. Ferrero, S. Trini Castelli, D. Anfossi, 2003, Turbulence fields for atmospheric dispersion models in horizontally non-homogeneous conditions, Atmospheric Environment., 37, n. 17, 2305-2315

53. Trini Castelli S., Anfossi D., Ferrero E., 2003, Evaluation of the environmental impact of two different heating scenarios in urban area, Int. Jour. of Environment and Pollution, 20 (1-6), 207-217

54. Ferrero E., A.Longhetto, L.Briatore, G. Chabert d'Hieres, H.Didelle, C.Giraud, P.Gleizon, 2002, A Laboratory Simulation of Mesoscale Flow Interaction with the Alps, Dynamics of Atmospheres and Oceans, Vol. 35 (1), 1-25

55. Ferrero E., Loglisci N. and Longhetto A., 2002, Numerical experiments of barotropic flow interaction with a 3-D obstacle, Journal of the Atmospheric Sciences, Vol. 59, No. 22, 3239-3253

56. Trini Castelli S., Ferrero E., Anfossi D., 2001, Turbulence Closures in Neutral Boundary Layer over Complex Terrain, Boundary-Layer Meteorology, 100, 405-419

57. Ferrero E., Trini Castelli S., Anfossi D., Finardi S., Di Lisi E., 2001, Study of different turbulence closure models simulating a neutral wind tunnel flow experiment, Hybrid Methods in Engineering, Vol. 3, 11-23

58. Ferrero E., Anfossi D. and Tinarelli G., 2001, Simulations of Atmospheric Dispersion in an Urban Stable Boundary Layer, Int. Jour. of Environment and Pollution Vol. 16, Nos. 1-6

59. Anfossi D., G. Degrazia, E. Ferrero, S.E. Gryning, M.G. Morselli, S. Trini Castelli, 2000, Estimation of the Lagrangian structure function constant C_0 from surface layer wind data, Boundary-Layer Meteorology, 95, 249-270

60. E.Ferrero, D. Anfossi, G.Tinarelli, M. Tamiazzo, 2000, Intercomparison of Lagrangian stochastic models based on two different PDFs, Int. Jour. of Environment and Pollution, Vol. 14, Nos. 1-6, 225-234

61. G.Degrazia, D.Anfossi, H.Fraga de Campos Velho, E.Ferrero, 1998, A Lagrangian decorrelation time scale in the convective boundary layer, Boundary-Layer Meteorology, 86, 525-534

62. E.Ferrero, D.Anfossi, 1998, Comparison of PDFs closure schemes and turbulence parameterizations in Lagrangian stochastic models, Int. Jour. of Environment and Pollution, Vol. 9, No. 4 , 384-410

63. D.Anfossi, F.Desiato, G.Tinarelli, G.Brusasca, E.Ferrero, D.Sacchetti 1998, Transalp 1989 experimental campaign - II: simulation of a tracer experiment with lagrangian particle models, Atmospheric Environment, Vol. 32, No. 7, 1157-1166

64. F.Desiato, D.Anfossi, S.Trini Castelli, E.Ferrero, G.Tinarelli, 1998, The role of wind field, mixing height and horizontal diffusion investigated through two Lagrangian particle models, Atmospheric Environment, Vol. 32, No 24, 4157-4165

65. D.Anfossi, E. Ferrero, G.Tinarelli and S.Alessandrini, 1997, A simplified version of the correct boundary conditions for skewed turbulence in Lagrangian Particle Models, Atmospheric Environment, Vol. 31, No 2, 301-308

66. D.Anfossi, E. Ferrero, D.Sacchetti, S.Trini Castelli, 1997, Comparison among empirical probability density functions of the vertical velocity in the surface layer based on higher order correlations, Boundary-Layer Meteorology, 82, 193-218

67. A.Longhetto, L.Briatore, G.Chabert d'Hieres, H.Didelle, E.Ferrero, C.Giraud, 1997 Physical simulations in rotating tank of lee cyclogenesis, Experiments in Fluids 22, 387-396

68. E.Ferrero, D.Anfossi, G.Brusasca, G.Tinarelli, S.Alessandrini and S.Trini Castelli, 1997, Simulation of atmospheric dispersion in convective boundary layer: comparison between two different Lagrangian particle models, Int. Jour. of Environment and Pollution, Vol 8, Nos. 3-6, 315-323

69. E.Ferrero, D.Anfossi, G.Tinarelli and S.Trini Castelli, 1997, An intercomparison of two turbulence closure schemes and four parameterizations for stochastic dispersion models, Il Nuovo Cimento C, vol. 20, N. 3, 315-329

70. A.Longhetto, L.Briatore, G.Chabert d'Hieres, H.Didelle, E.Ferrero, C.Giraud, 1997, Physical modelling of baroclinic development in the lee of the Alps, Annali di Geofisica, vol XL, n. 5, 1293-1302

71. A.Longhetto, G.Chabert d'Hieres, L.Briatore, H.Didelle, E.Ferrero, C.Giraud, 1996, A laboratory experiment on the development of cyclogenesis in the lee of a mountain, Il Nuovo Cimento , vol 19C, N. 4, 561-578

72. F.Tampieri, U.Giostra, F.Trombetti, D.Anfossi, E.Ferrero, G.Tinarelli, 1995, Flux-gradient relationship for turbulent dispersion over complex terrain, Nonlinear Processes in Geophysics, 2, 89-100

73. E.Ferrero, D. Anfossi, G. Brusasca, G. Tinarelli, 1995, Lagrangian particle model LAMBDA: evaluation against tracer data, Int. Jour. of Environment and Pollution, Vol 5, Nos. 4-6, 360-374

74. S.Alessio, L.Briatore, R.Cremonini, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, R.Purini, 1995, Laboratory simulation of inertial and frictional effects on barotropic rotating flows over and past obstacles: comparison with simple numerical and analytical models, Il Nuovo Cimento, vol 18 C, N. 6, 603-627

75. G.Tinarelli, D.Anfossi, G.Brusasca, E.Ferrero, U.Giostra, M.G.Morselli, J.Moussafir, F.Tampieri, F.Trombetti, 1994, Lagrangian particle simulation of tracer dispersion in the lee of a schematic two-dimensional hill, Journal of Applied Meteorology, vol. 33, No. 6, 744-756

76. D.Anfossi, E.Ferrero, G.Brusasca, A.Marzorati, G.Tinarelli, 1993, A simple way of computing buoyant plume rise in a lagrangian stochastic model for airborne dispersion, Atmospheric Environment, vol 27A, No 9, 1443-1451

77. S.Alessio, L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1993, Experimental study in a rotating channel on similarity law of tracer concentration distribution in the turbulent Ekman boundary layer, Atmospheric Environment, Vol. 27A, No 13, 2075-2083

78. F.Tampieri, C.Scarani, U.Giostra, G.Brusasca, G.Tinarelli, D.Anfossi, E.Ferrero, 1992, On the application of Random Flight Dispersion Models in inhomogeneous turbulent flows, Annales Geophysicae 10, 749-758

79. S.Alessio, L.Briatore, G.Elisei, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1992, Laboratory simulation of Coriolis effects on atmospheric dispersion of airborne tracers over a complex terrain, Il Nuovo Cimento, vol 15C, N. 4, 461-472

80. S.Alessio, L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1992, Interaction between atmospheric flows and obstacles: experiments in a rotating channel, Boundary-Layer Meteorology 60, 235-241

81. D.Anfossi, E.Ferrero, G.Brusasca, G.Tinarelli, U.Giostra, F.Tampieri, F.Trombetti, 1992, Dispersion simulation of a wind tunnel experiment with lagrangian particle models, Il Nuovo Cimento Vol. 15 C, N. 2, 139-158

82. S.Alessio, L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1989, Experimental results on atmospheric dynamical and thermal structures modeled in a rotating hydraulic channel, Il Nuovo Cimento, Vol. 12 C, N. 4, 427-438

6.2 Book Chapters

1. G.Brusasca, G.Tinarelli, D.Anfossi, E.Ferrero, F.Tampieri, F.Trombetti, 1994, Development of a Lagrangian stochastic model for dispersion in complex terrain, Air Pollution Modelling and its Applications X, Edited by S-E. Gryning and M.M. Millan, Plenum Press, 329-336

2. G.Tinarelli, D.Anfossi,G.Brusasca, E.Ferrero, U.Giostra, M.G. Morselli, F.Tampieri, F.Trombetti, 1994, Lagrangian model simulation of 3-D concentration distribution in complex terrain, Air Pollution Modelling and its Applications X, Edited by S-E. Gryning and M.M. Millan, Plenum Press, 621-622

3. E.Ferrero, F.Desiato, G.Brusasca, D.Anfossi, G.Tinarelli, M.G.Morselli, S.Finardi, D.Sacchetti 1996, Intercomparison of 3-D flow and particle models with TRANSALP 1989 meteorological and tracer data, Air Pollution Modelling and its Applications XI, Edited by S-E. Gryning and M.M. Millan, Plenum Press, 559-567

4. E.Ferrero and D.Anfossi, 1998, Sensitivity analysis of Lagrangian stochastic models for CBL with different PDF's and turbulence parameterizations, Air Pollution Modelling and its Applications XII, Edited by S-E. Gryning and N. Chaumerliac, Plenum Press, 673-680

5. F.Desiato, D.Anfossi, S.Trini Castelli, E.Ferrero and G.Tinarelli, 1998, Intercomparison of two long-range Lagrangian particle models with ETEX tracer data, Air Pollution Modelling and its Applications XII, Edited by S-E. Gryning and N. Chaumerliac, Plenum Press, 267-273

6. D.Anfossi, G.Degrazia, E.Ferrero, S.E.Gryning, M.G.Morselli and S.Trini Castelli, 2000, Estimation of Kolmogorov constant C_0 from sonic anemometer measurements in the atmospheric surface layer Air Pollution Modelling and its Applications XIII, Edited by S-E. Gryning and E.Batchvarova, Kluwer/Plenum Press, 631-637

7. G.Tinarelli, D.Anfossi , M.Bider, E.Ferrero, and S.Trini Castelli, 2000, A new high performance version of the Lagrangian particle dispersion model spray, some case studies, Air Pollution Modelling and its Applications XIII, Edited by S-E. Gryning and E.Batchvarova, Kluwer/Plenum Press, 499-506

8. G.Degrazia, D.Anfossi, J.Carvalho, H.F. Campos Velho, E.Ferrero, Mangia, U.Rizza and S.Trini Castelli, 2000, Turbulence parametrization for PBL dispersion models in all stability conditions, Air Pollution Modelling and its Applications XIII, Edited by S-E. Gryning and E.Batchvarova, Kluwer/Plenum Press, 745-756

9. E. Ferrero, D. Anfossi, G. Tinarelli and S. Trini Castelli, 2001, Lagrangian particle simulation of an EPA wind tunnel tracer experiment in a schematic

two-dimensional valley, Air Pollution Modelling and its Applications XIV, Edited by Gryning and Schiermeier, Kluwer/Plenum Press, New York, 717-718

10. S.Finardi, G.Tinarelli, A.Nanni, D.Anfossi, E.Ferrero and S.Trini Castelli, 2001, In situ diagnostic or nested prognostic meteorological models to drive dispersion simulations in complex area: a comparison in a real application, Air Pollution Modelling and its Applications XIV, Edited by Gryning and Schiermeier, Kluwer/Plenum Press, New York, 641-649

11. Mortarini L. and Ferrero E., 2004, Concentration fluctuations in turbulent flow, Air Pollution Modelling and its Applications XVII, C. Borrego and A-L Norman eds., Springer, pp. 698-700

12. E.Ferrero, Theory, Section 2.2 of Chapter 11 of Air Quality Modeling, Ed. by P. Zannetti, Air & Waste Management Association (A&WMA) Pub., USA, 2005

13. D.Anfossi, E. Ferrero, M. Hibberd Choice of Eulerian PDF, Section 2.3 of Chapter 11 of Air Quality Modeling, , Ed. by P. Zannetti, Air & Waste Management Association (A&WMA) Pub., USA, 2005

14. E.Ferrero, Simulation of dispersion in stable condition, Simulation of dispersion in neutral condition, Simulation of dispersion in urban condition, Sections 3.2, 3.3, 3.4, of Chapter 11 of Air Quality Modeling, , Ed. by P. Zannetti, Air & Waste Management Association (A&WMA) Pub., USA, 2005

15. D. Anfossi, S. Alessandrini, S. Trini Castelli, E. Ferrero, D. Oettl, G. Degrazia, 2006 Lagrangian particle model simulation of tracer dispersion in stable low wind speed conditions, Developments in Environmental Science 6. Air Pollution Modelling and its Applications XVIII, C. Borrego and E. Renner eds., Elsevier, 352-361

16. S. Alessandrini, C. Pertot, E. Ferrero, M. Costa, S. Trini Castelli, D. Anfossi, 2006 One year simulation of power plant emissions using a parallel lagrangian particle model, Developments in Environmental Science 6. Air Pollution Modelling and its Applications XVIII, C. Borrego and E. Renner eds., Elsevier, 761-763

17. S. Alessandrini and E. Ferrero, 2010, An Application of Lagrangian Particle Model with Chemical Reactions to Power Plant Pollution Dispersion in Complex terrain, In Air Pollution Modeling and its Application XX, Steyn, Douw G.; Rao, S. T. (Eds.), Springer, 1st Edition, XLVIII, 638 p. [Proceedings of the 30th NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application,18 - 22 May, 2009, San Francisco, USA]

18. Mortarini, L, Ferrero, E, Franzese, P, 2010, New Boundary Conditions for Positive and Negative Skewed Turbulence in Fluctuating Plume Models, in AIR POLLUTION MODELING AND ITS APPLICATION XX, pp. 57-62, Edited by: Steyn, DG and Rao, ST, Proceedings of the 30th NATO/SPS International Technical Meeting on Air Pollution Modeling and Its Applications,18 - 22 May, 2009, San Francisco, USA]

19. L. Mortarini, E. Ferrero, (2012), Fast model to compute the concentration covariance of two passive scalars from their mean concentration field, In Air Pollution Modeling and its Application XXI, Steyn, Douw G.; Trini Castelli, Silvia (Eds.), Springer, LV, 766 p. , 31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 27 Sept - 01 Oct, 2010, Torino, Italy. Torino, Italy.

20. S.Alessandrini, E. Ferrero, D. Anfossi, (2012) A new method for buoyant plume rise computation in Lagrangian particle models , In Air Pollution Modeling and its Application XXI, Steyn, Douw G.; Trini Castelli, Silvia (Eds.), Springer, LV, 766 p. [31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 27 Sept - 01 Oct, 2010, Torino, Italy.

21. Alessia Balanzino, Enrico Ferrero, Guido Pirovano, Giuseppe M. Riva and Mauro Causà, (2012), Intercomparison between two air pollution simulations in northern Italy based on different emission inventories Air Pollution Modeling and its Application XXI, Steyn, Douw G.; Trini Castelli, Silvia (Eds.), Springer, LV, 766 p. [31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 27 Sept - 01 Oct, 2010. Torino, Italy]

22. Enrico Ferrero, Stefano Alessandrini and Domenico Anfossi Plume rise model verification against highly buoyant plume laboratory, 34th International Technical Meeting on Air Pollution Modelling and its Application May 4-8, 2015 Montpellier, France

23. Ferrero, Enrico; Vandenberghe, F.; Alessandrini, S.; Mortarini, Luca, Comparison of WRF PBL models in Low-wind speed conditions against measured data, Proccedings of the 35th International Technical Meeting on Air Pollution Modelling and its Application, October 3 - 7, 2016 Chania, Crete, Greece

6.3 Proceedings

1. G.Tinarelli, U.Giostra, E.Ferrero, F.Tampieri, D.Anfossi, G.Brusasca, F.Trombetti, 1992, Spray, a 3-D particle model for complex terrain dispersion, American Meteorological Society's, Proceedings of 10th Symposium on Turbulence and Diffusion, Portland, Oregon, September 29 - October 2, 1992, 147-150

2. A.Marzorati, G.Brusasca, V.Colombo, S.Bistacchi, G.Bocchiola, P.Marcacci, M.G.Morselli, G.Quinteri, F.Rocchetti, G.Tinarelli, D.Anfossi, E.Ferrero, D.Sacchetti, 1993, Vertical soundings and surface measurements of meteorological variables performed by ENEL/CNR team during TRACT 1992 Campaign, EUROTRACT Annual Report 1992, Part 2, Garmisch-Partenkirchen, 171-188

3. G.Tinarelli, D.Anfossi, G.Brusasca, E.Ferrero, M.G.Morselli, J.Moussafir, 1994, A complete 3-D Lagrangian particle model to simulate the dispersion of non-reacting pollutants over complex terrain, Proceedings of the Workshop on 'Intercomparison of advanced practical short-range atmospheric dispersion models', 30/8-3/9 1993, Manno, Switzerland, edited by C.Cuvelier, 103-111

4. S.Alessio, L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1994, Laboratory simulations of interaction between barotropic flow and schematic 3D obstacles, Proceedings of the 2nd International Conference on Experimental Fluid Mechanics, July 4-8, 1994 - Torino, Italy, Edited by M.Onorato, 169-176

5. L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, G.Chabert d'Hieres, H.Didelle, 1994, Physical simulations in rotating tank of lee cyclogenesis, Proceedings of the 2nd International Conference on Experimental Fluid Mechanics, July 4-8, 1994 - Torino, Italy, Edited by M.Onorato, 177-184

6. A.Marzorati, G.Brusasca, M.G.Morselli, G.Tinarelli, D.Anfossi, C.Cassardo, E.Ferrero, D.Sacchetti, 1994, Mesoscale transport of atmospheric pollutants across the central alps, (TRANSALP) EUROTRACT Annual Report 1993, Part 10, Garmisch-Partenkirchen, 142-145

7. D.Anfossi, F.Desiato, S.Trini Castelli, E.Ferrero, G.Tinarelli, 1997, The role of horizontal diffusion and mixing height parameterization in the ETEX long-rang dispersion modelling, Proceeding of ETEX Symposium on long-range atmospheric transport, model verification and emergency response, 13-16-May 1997, Vienna, 187-190

8. S.Trini Castelli, E.Ferrero, D.Anfossi, 1997, Comparison between different turbulence closures in a flow model applied to a schematic 2-D valley in a wind tunnel experiment, Proceedings of 2nd EACWE, Genova, June, 22-26, 1997, 317-324

9. S.Trini Castelli, E.Ferrero, D.Anfossi and R. Ying, 1999, Comparison of turbulence closure models over a schematic valley in a neutral boundary layer, Proceedings of 13th Symposium on Boundary Layers and Turbulence, 79th AMS Annual Meeting, 10-15 January 1999, Dallas, USA, 601-604

10. E. Ferrero, M. Tamiazzo, D.Anfossi and G.Tinarelli, 1999, Lagrangian stochastic models applied to urban atmospheric dispersion, Proc. of 4th

Int. Congress Energy, Environment and Technological Innovation, Sept. 19-24, 1999, Rome, Italy, 15-20

11. Ferrero E., Trini Castelli S., Anfossi D., 2001, Simulation of a Diffusion Experiment in Neutral Conditions Over Gentle Topography, Proc. of 7th International Conference on Harmonisation within Atmospheric Dispersion Modelling for regulatory Purposes, Belgirate (IT), 385-389

12. E.Ferrero, N.Loglisci, A.Longhetto, 2001, Rotating flow interaction with 3d obstacle, Proceedings of the 2001 3rd International Symposium on Environmental Hydraulics, Dec. 5-8 2001, ASU, USA

13. Trini Castelli S., Ferrero E., Anfossi D., 2003, Atmospheric dispersion in non-homogeneous conditions simulation of a wind tunnel tracer experiment, Proc. of Physmod2003, 3-5 September 2003, Prato Italy

14. Ferrero E., Longhetto A., Manfrin M., Montabone L., Mortarini L., Didelle H., Sommeria J., Giraud C., Bertoni D., Forza R., 2003, Physical simulation of atmospheric flow and turbulence, Proc. of Physmod2003 Conference, 3-5 September 2003, Prato Italy

15. Ferrero E., Genovese R, Longhetto A., Manfrin M., Montabone L., Mortarini L., Giraud C., 2005, Turbulent flow measurements in a new hydrodynamic rotating tank, Proc. of Physmod2005 Conference, 23-26 August 2005, London, Canada

16. Alessandrini S, E.Ferrero, C.Pertot, S.Trini Castelli, E.Orlandi, 2005, Turbulence closure in atmospheric circulation model and its influence on the dispersion, Proc. of 10th International Conference on Harmonisation within Atmospheric Dispersion Modelling for regulatory Purposes, October, Creta, Greece

17. A. Balanzino, C. Pertot, G. Pirovano, M. Causa', E. Ferrero, S. Alessandrini, M.P. Costa Intercomparison between national and regional scale photochemical pollution simulations over Northern Italy, 6th International Conference on Urban Air Quality, Cyprus, 27-29 March 2007

18. A. Balanzino, M. Causà, E. Ferrero, C. Pertot and G.Pirovano, Photochemical Pollution Modelling In Complex Terrain, Proc. of 11th International Conference on Harmonisation within Atmospheric Dispersion Modelling for regulatory Purposes, July 2nd-5th, 2007, Cambridge UK

19. L. Mortarini, E. Ferrero and P. Franzese, Concentration Fluctuations Inside A Plant Canopy, Proc. of 11th International Conference on Harmonisation within Atmospheric Dispersion Modelling for regulatory Purposes, July 2nd-5th, 2007, Cambridge UK

20. S. Alessandrini and E. Ferrero, A lagrangian particle model with chemical reactions: application in real atmosphere, Hrvatski Meteoroloski Casopis 43 PART 1 (Croatian Meteorological Journal), 43, 235-239 (Proc. Harmo12 Conference, Cavtat, Croatia, October 6th-9th, 2008)

21. A.Balanzino, G.Pirovano, G.M.Riva, E.Ferrero, M.Causa', PM10 transport and diffusion in Northern Italy, Croatian Meteorological Journal (Hrvatski Meteoroloski Casopis 43 PART 2), 43, 454-458 (Proc. Harmo12 Conference, Cavtat, Croatia, October 6th-9th, 2008)

22. S. Alessandrini, G. Decimi, L. Palmieri, E. Ferrero, A Wind Power Forecast System in Complex Topographic Conditions, EWEC2009, Marseille, France 16 - 19 March 2009

23. Mortarini, L , Ferrero, E , Richiardone, R , Falabino, S , Anfossi, D , Trini Castelli, S , and Carretto, E (2009) Assessment of dispersion parameterizations through wind data measured by three sonic anemometers in a urban canopy, Adv. Sci. Res., 3, 91-98

24. R. Prandi, S. Di Savino, E. Ferrero, F. Pavone, Monitoring POPs in a complex environment: the role of modelling (Poster) Proc. of 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for regulatory Purposes, Paris June 1-4, 2010

25. L. Mortarini, S. Alessandrini, E. Ferrero, D. Anfossi, and M. Manfrin, Water Tank Simulation of a dense fluid release. 33rd International Technical Meeting on Air Pollution Modelling and its Application, 26-30 August, 2013, Miami, Florida USA

26. Lagrangian simulation of plume rise in strong capping inversion, 17th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, May 09-12, 2016, Budapest, Hungary

27. Andrea Bisignano, Luca Mortarini, Enrico Ferrero, Model chain for buoyant plume dispersion, 17th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, May 09-12, 2016, Budapest, Hungary

28. E. Ferrero, S. Alessandrini, F. Vandenberghe, WRF PBL models comparison against data measured in a urban environment, Proceedings of 10th International Conference on Air Quality Science and Application, Milan, 14-18 March 2016

29. Enrico Ferrero, Stefano Alessandrini, Bret Anderson, Elena Tomasi, Smoke plume from fire Lagrangian simulation and valida-tion using ground-based lidar data, Proceeedings of HARMO18 18th International Conference on Harmonisation within Atmospheric Dis- persion Modelling for Regulatory Purposes, Bologna October 9th-12th, 2017

30. Stefano Alessandrini, Enrico Ferrero, Elena Tomasi, Simulation of the Fukushima accident: sensitivity tests on turbulence parameters in the upper troposphere, Proceeedings of HARMO18 18th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Bologna October 9th-12th, 2017

31. Elena Tomasi, Lorenzo Giovannini, Pedro Jimenez, Branko Kosovic, Stefano Alessandrini, Enrico Ferrero, Marco Falocchi, Dino Zardi and Luca Delle Monache, A 3D Planet Boundary Layer scheme for the representation of dispersion processes in sub-kilometer horizontally non-homogeneous flows, Proceeedings of HARMO18 18th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Bologna October 9th-12th, 2017

32. Tomasi, Elena; Giovannini, Lorenzo; Jimenez, Pedro; Kosovic, Branko; Alessandrini, Stefano; Ferrero, Enrico; Falocccchi, M; Zardi, Dino; Delle Monache, Luca; , WRF PBL Schemes for Turbulence Parameterizations: Representing Dispersion Processes in Sub-Kilometer Horizontally Non-Homogeneous Flows,"Proceedings of the 18th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Bologna, Italy" 9-12, 2017,

33. Elena Tomasi, Gianluca Antonacci, Lorenzo Giovannini, Marco Falocchi, Stefano Alessandrini, Enrico Ferrero and Dino Zardi The Bolzano tracer experiment (BTEX): an experiment on tracer gas dispersion from an incinerator stack and on its real-time modelling (Poster), Proceeedings of HARMO18 18th International Conference on Harmonisation within Atmospheric Disper- sion Modelling for Regulatory Purposes, Bologna October 9th-12th, 2017

34. Andrea Bisignano, Enrico Ferrero, Luca Mortarini, Stefano Alessandrini, A Lagrangian dispersion model with a stochastic equation for the temperature fluctuations, Proceedings of HARMO18 18th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Bologna October 9th-12th, 2017

35. Dietmar Oettl, Enrico Ferrero, Hanns Moshammer, Lisbeth Weitensfelder, Michael Kropsch, Michael Mandl Recent developments in odour modelling and assessment in Styria and Salzburg, Austria, Proceedings of HARMO19 19th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Bruges, Belgium, in June 2019

36. Enrico Ferrero, Federica Ive, Luca Mortarini, Pietro Salizzoni, Massimiliano Manfrin, Andrea Bisignano Physical model of buoyant plume development, Proceedings of HARMO19 19th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Bruges, Belgium, in June 2019

6.4 Italian Journals

1. G.Brusasca, G.Tinarelli, D.Anfossi, E.Ferrero, G.Castelli, M.Centemeri, G.Finzi, 1991, LAMBDA: Lagrangian Model for Buoyant Dispersion in Atmosphere, in Guida di Informatica Ambientale, Patron Editore, 217-222, 1991

2. G.Brusasca, D.Anfossi, E.Ferrero, 1992, Modelli per la simulazione della dispersione di inquinanti in atmosfera, Le Scienze ed. italiana di Scientific American, n. 288, pp. 38-49, agosto 1992.

3. E.Ferrero, 1992, La modellistica dell'inquinamento atmosferico in relazione a particolari scenari ambientali, Bollettino Geofisico, anno XV, N. 3, p. 1, 1992

4. E. Ferrero ed E. Scalas, 2005, Dal moto Browniano ai sistemi complessi, Ateneo e Citta', UPO, 21-23

6.5 Proceedings Italian Conferences

1. U.Giostra, F.Tampieri, G.Brusasca, G.Tinarelli, D.Anfossi, E.Ferrero, 1992, Sulla applicazione di modelli di dispersione Lagrangiani a condizione di turbolenza non omogenea, GNAFAO Congresso Nazionale, Roma 8-10 Giugno 1992, Bollettino Geofisico, anno XV, N.1, pp 90-91, 1992

2. S.Alessio, L.Briatore, G.Elisei, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1992, Studio modellistico in canale idraulico rotante del trasporto e della diffusione di traccianti atmosferici in un comprensorio a terreno complesso, "Geophysics and environment: Background air pollution", Roma 16-18 giugno 1992. Bollettino Geofisico, anno XV, N.5, novembre 1992

3. L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, 1993, Simulazione di effetti ciclogenetici nel Mediterraneo GNFAO 10^o Congresso Nazionale, Lerici 3-4-5 novembre 1993: 'Il ruolo della fisica dell'atmosfera e dell'oceano negli studi ambientali', Bollettino Geofisico, anno XVI, N.2-3, Dicembre, 1993

4. Cambiaso A. e Ferrero E., 2000, Sistema di acquisizione ed elaborazione immagini per misure fluidodinamiche, Best Applications of Measurement and Automation Contest, NIDays 2000.

6.6 International Conferences

1. D.Anfossi, E.Ferrero, G.Brusasca, G.Tinarelli, U.Giostra, F.Tampieri, F.Trombetti, 1990, A random walk model suitable for dealing with isolated source dispersion in flows over hills, EUROMECH Colloquium 266 "Airflow and Turbulence in Complex Terrain", Bologna 27-28-29 august 1990.

2. F.Tampieri, F.Trombetti, D.Anfossi, E.Ferrero, G.Tinarelli, G.Brusasca, 1991, A Lagrangian Stochastic Model for dispersion in the Atmospheric Convective Boundary Layer, XVI General Assembly of European Geophysical Society, Wiesbaden 22-26 aprile 1991.

3. G.Brusasca, G.Tinarelli, D.Anfossi, E.Ferrero, G.Castelli, M.Centemeri, G.Finzi, 1991, Software presentation of LAMBDA code, 19th ITM on Air Pollution Modelling and its Application, NATO/CCMS, Ierapetra, Crete (GREECE), 29/9 - 4/10, 1991

4. G.Brusasca, G.Tinarelli, D.Anfossi, E.Ferrero, G.Castelli, M.Centemeri, G.Finzi, 1991, LAMBDA: Lagrangian Model for Buoyant Dispersion in Atmosphere, 3th International Software Exhibition for Environmental Science and Engineering, Como, 18-19 Ottobre 1991.

5. D.Anfossi, G.Brusasca, A.Marzorati, E.Ferrero, M.G.Morselli, S.Finardi, G.Tinarelli, 1993, Lagrangian particle simulation of TRANSALP cases, TRACT Workshop, November 18-19, Karlsruhe (Germany)

6. Ferrero, D. Anfossi, G. Brusasca, G. Tinarelli, 1994, Particle model simulation of tracer dispersion in very complex terrain, XIX General Assembly of the EUROPEAN GEOPHYSICAL SOCIETY, Grenoble (F), 25-29 April 1994

7. E.Ferrero, L.Briatore, C.Giraud, A.Longhetto, G.Chabert d'Hieres, H.Didelle, 1995, Laboratory experiments on rotating platform of mesoscale flow interactions with mountains, XX General Assembly of the European Geophysical Society, Hamburg (G), 3-7 April 1995

8. Anfossi, E. Ferrero, D.Sacchetti, S.Trini Castelli, 1995, Vertical wind velocity pdf in the neutral and unstable surface layer, EUROMECH Colloquium 338 on Atmospheric Turbulence and Dispersion in Complex Terrain, Bologna, September 1995

9. S.Trini Castelli, D.Anfossi, G.Brusasca, E.Ferrero, S.Finardi, G.Tinarelli, 1995, Intercomparison of 3D turbulence parameterizations as input to 3D dispersion Lagrangian particle models, EUROMECH Colloquium 338 on Atmospheric Turbulence and Dispersion in Complex Terrain, Bologna, September 1995

10. D.Anfossi, E.Ferrero, S.Trini Castelli, 1997, Applications of RAMS to study the flow over complex terrain: simulation of a wind tunnel experiment (poster), MAP Meeting 1997, Belgirate (VB), June 11-13, 1997

11. D.Anfossi, G.Degrazia, E.Ferrero, S.E.Gryning, M.G.Morselli and S.Trini Castelli, 1998, Experimental evaluation of Kolmogorov constant C0 in the atmospheric surface layer, XXIII General Assembly of the European Geophysical Society, Nice, 20-24 April 1998

12. E.Ferrero, N.Loglisci, A.Longhetto, 1999, Vortex-topography interaction in barotropic flows, EGS XXIV General Assembly, The Hague (NL), 19-23 April 1999

13. Ferrero E., Trini Castelli S., Anfossi D., Finardi S., Di Lisi E., 1999, Study of different turbulence closure models simulating a neutral wind, Workshop on Physics of the Planetary Boundary Layer and Dispersion Process Modelling November 23-26 1999, Santa Maria (RS), (Brasil)

14. E. Ferrero, S. Trini Castelli and D. Anfossi, 2000, Turbulence Closure Models In Stable Stratification Over Schematic Complex Terrain, EGS XXV General Assembly

15. E.Ferrero, V.M. Canuto, Y. Cheng, 2001, Numerical Simulation of Shear Driven, Neutral Boundary Layer with New Third Order Moments, EGS XXVI General Assembly, Nice (FR), March 2001

16. S. Trini Castelli, E. Ferrero, D. Anfossi, R. Ohba, 2002, Numerical Study of Turbulence Closures in Boundary Layer Flows around a 3D Hill, EGS XXVII General Assembly, Nice, France, April 2002

17. Trini Castelli, E.Ferrero, D.Anfossi, 2002, Turbulence closure models and their applications in RAMS, 5th RAMS Workshop and related applications, Santorini (GR) Sept. 29 - Oct. 3

18. D. Anfossi, E. Ferrero and S. Trini Castelli, 2003, Simulation of transport and diffusion in complex terrain by an integrated modeling system, Invited paper at the International Conference and Young Scientists School on Computational Information Technologies for Environmental Sciences:"CITES-2003", Tomsk, Russia, September 1-10, 2003

19. Mortarini L. and E. Ferrero, 2003, Two particle statistics in homogeneous isotropic stationary turbulence, (Poster) Workshop of the ICTP-INMF Summer School on "Transport, Reaction and Propagation in Fluids", 8-12 September 2003, Trieste, Italy

20. Mortarini L. and E. Ferrero, 2004, A Lagrangian stochastic model for the concentration fluctuations, (Poster), 1st European Geosciences Society General Assembly, Nizza, April, 26-29, 2004

21. Mortarini L., E. Ferrero and P Franzese, 2005, A Two-Dimensional Lagrangian Model for Non-Gaussian Inhomogeneous Turbulence Within a Plant Canopy, 9th GMU Annual Conference July , July 18-20, 2005, Fairfax, VA, USA

22. Ferrero E and N Colonna, 2005, Turbulence closure with higher order moments (Poster), EMS 5th Conference, 12-16 September, Utrecht (NL)

23. Ferrero E, Genovese R, Delerce G., Longhetto A., Manfrin M., Montabone L., Mortarini L., Giraud C., 2005, Experimental measurements of turbulence higher order moments, EMS 5th Conference, 12-16 September, Utrecht (NL)

24. Genovese R., Longhetto A., Ferrero E., Manfrin M., Mortarini L., Turbulent structures in rotating boundary layers, European Geosciences Union General Assembly 2006, Vienna, Austria, 02 - 07 April 2006

25. Colonna N.M., Ferrero E., Non-Local PBL Models Based on Higher Order Moments Closure (poster) European Geosciences Union General Assembly 2006, Vienna, Austria, 02 - 07 April 2006

26. Mortarini L., Ferrero E., Franzese P., A one-dimensional fluctuating plume model for non-Gaussian inhomogeneous turbulence within a plant canopy. (poster) European Geosciences Union General Assembly 2006, Vienna, Austria, 02 - 07 April 2006

27. Colonna N.M. and Ferrero E., Boundary layer simulations with a third-order closure model, 39th International Liege Colloquium on Ocean Dynamics and 3rd Warnemunde Turbulence Days - Turbulence Re-Revisited, Liege, May 7-11, 2007

28. L. Mortarini, E. Ferrero, R. Richiardone, S. Falabino, D. Anfossi, S. T. Castelli and E. Carretto, Field Campaign Results in Urban Area, 12th Annual George Mason University Conference on Atmospheric Transport and Dispersion Modeling, July 8-10, 2008, Fairfax, VA, USA

29. N. M. Colonna, E. Ferrero and U. Rizza, Stably stratified boundary layer simulations with a non-local closure model 18th Symposium on Boundary Layers and Turbulence, AMS, 9–13 June 2008, Stockholm

30. L. Mortarini, E. Ferrero and P. Franzese, Boundary layer high order concentration statistics 18th Symposium on Boundary Layers and Turbulence, AMS, 9–13 June 2008, Stockholm

31. Luca Mortarini, Stefano Alessandrini, Enrico Ferrero, Domenico Anfossi, and Massimiliano Manfrin, Testing of a new dense gas approach in the Lagrangian Dispersion Model SPRAY. Geophysical Research Abstracts Vol. 15, EGU2013-8041, 2013 EGU General Assembly 2013

32. Zardi,D, Alessandrini,S.,Antonacci,G., Bisignano,A., Falocchi,M.,Ferrero,E., Giovannini,L., Guariento,M., Lodi,M., Mortarini,L., Palmitano,M., Tirler,W., Tomasi,E., Verdi,L. (2017) Experimental validation of a modelling chain simulating the dispersion of pollutants from the incinerator of Bolzano (Italy), 34th international conference on alpine meteorology. Reykjavk, Iceland, 18-23 June 2017

6.7 Comunicazioni a convegni nazionali

1. D.Anfossi, G.Bonino, E.Ferrero, A.Longhetto, R.Civera, F.Sordi, 1989, Criteri di definizione di una rete a partire da modelli di diffusione e trasporto, Convegno ANIPLA su "Reti automatiche di rilevamento per il controllo della qualita' dell'aria", Milano, 28-29 novembre 1989.

2. E.Ferrero, D.Anfossi, G.Brusasca, G.Tinarelli, 1991, Evaluations of stochastic velocity distribution in the Lagrangian Particles Models for atmospheric dispersion, VI Congresso Nazionale dell'Associazione Italiana Fisica Biomedica, Genova, 24-28 giugno 1991.

3. S.Alessio, L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1991, Modellazione idrodinamica delle circolazioni su un sito a orografia complessa, Societa' Italiana di Fisica, LXXVII Congresso, Sezione 6: "Geofisica e Fisica dell'Ambiente", L'Aquila, 30/9-5 /10 1991

4. S.Alessio, L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1991. Sperimentazioni sull'interazione tra flussi atmosferici e ostacoli bidimensionali, Societa' Italiana di Fisica, LXXVII Congresso, Sezione 6: "Geofisica e Fisica dell'Ambiente", L'Aquila, 30/9-5/10 1991

5. S.Alessio, L.Briatore, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, 1991, Sulla adimensionalizzazione dei profili di concentrazione misurati su un modello fisico, Societa' Italiana di Fisica, LXXVII Congresso, Sezione 6: "Geofisica e Fisica dell'Ambiente", L'Aquila, 30/9-5/10 1991

6. D.Anfossi, G.Brusasca, G.Tinarelli, E.Ferrero, 1991, Introduzione del plume rise nei modelli di diffusione a particelle, Societa' Italiana di Fisica, LXXVII Congresso, Sezione 6: "Geofisica e Fisica dell'Ambiente", L'Aquila, 30/9-5/10 1991

7. S.Alessio, L.Briatore, G.Carnevale, E.Ferrero, C.Giraud, A.Longhetto, O.Morra, R.Purini, 1992, Interazione di flussi con la topografia in sistemi rotanti: confronti preliminari tra simulazioni di laboratorio e numeriche, 9^0 Convegno Nazionale GNFAO, Roma 8-9-10 giugno 1992

8. D.Anfossi, G.Brusasca, E.Ferrero, U.Giostra, F.Tampieri, G.Tinarelli, 1992, Dispersione di inquinanti in flussi turbolenti non omogenei: applicazioni di un modello a "random flight", Societa' Italiana di Fisica, LXXVIII Congresso, Sezione 6: "Geofisica e Fisica dell'Ambiente", Pavia 5-10 ottobre 1992.

9. D.Anfossi, E.Ferrero, G.Brusasca, A.Marzorati, G.Tinarelli, 1992, Confronto tra misure DIAL di plume rise e simulazioni con un modello a particelle, LXXVIII Congresso Nazionale della S.I.F. - Pavia, 5 - 10 ottobre 1992

10. D.Anfossi, G.Brusasca, E.Ferrero, U.Giostra, J.Moussafir, F.Tampieri, G.Tinarelli, F.Trombetti, 1992, Prove di validazione per il modello tridimensionale lagrangiano a particelle SPRAY, LXXVIII Congresso Nazionale della S.I.F. - Pavia, 5 - 10 ottobre 1992

11. C.Giraud, P.Bacci, A.Longhetto, E.Ferrero, L.Briatore, R.Forza, G.Chabert d'Hieres, H.Didelle, 1993, Simulazione in laboratorio di processi di ciclogenesi con ostacoli schematici, Societa' Italiana di Fisica, LXXIX Congresso, Sezione 6 "Geofisica e Fisica dell'Ambiente", Udine 27/9 - 2/10, 1993.

12. D.Anfossi, G.Brusasca, G.Tinarelli, E.Ferrero, U.Giostra, F.Tampieri, F.Tormbetti, 1993, Relazione flusso-gradiente in situazioni di terreno complesso Societa' Italiana di Fisica, LXXIX Congresso, Sezione 6 "Geofisica e Fisica dell'Ambiente", Udine 27/9 - 2/10, 1993.

13. C.Cassardo, D.Sacchetti, D.Anfossi, A.Longhetto, E.Ferrero, M.G.Morselli, G.Brusasca, G.Tinarelli, A.Marzorati, 1993, Elaborazione di dati di un anemometro ultrasonico, Societa' Italiana di Fisica, LXXIX Congresso, Sezione 6 "Geofisica e Fisica dell'Ambiente", Udine 27/9 - 2/10, 1993.

14. Ferrero, D. Anfossi, G. Brusasca, G. Tinarelli, 1994, Simulazioni numeriche di dispersione di inquinanti in atmosfera con differenti data-set e model evaluation, LXXX Congresso Nazionale della S.I.F. - Lecce, 26 settembre - 3 ottobre 1994

15. Anfossi, E. Ferrero, G. Brusasca, G. Tinarelli, 1994, Valutazione dell'applicabilita' e delle prestazioni di uno schema numerico stocastico per modelli di dispersione a particelle, LXXX Congresso Nazionale della S.I.F. - Lecce, 26 settembre - 3 ottobre 1994

16. D.Sacchetti, D. Anfossi, E. Ferrero, 1994, Verifica di ipotesi sull forma della p.d.f. della velocita' verticale del vento con dati misurati da un anemometro sonico in diverse condizioni di stabilita', LXXX Congresso Nazionale della S.I.F. - Lecce, 26 settembre - 3 ottobre 1994

17. E.Ferrero, L.Briatore, A.Longhetto, C.Giraud, 1994, Simulazioni di laboratorio della ciclogenesi alpina, LXXX Congresso Nazionale della S.I.F. - Lecce, 26 settembre - 3 ottobre 1994

18. E.Ferrero, S.Alessio, L.Briatore, A.Longhetto, C.Giraud, O.Morra, 1994, Confronto tra simulazioni fisiche e numeriche di interazioni di vortici barotropici, LXXX Congresso Nazionale della S.I.F. - Lecce, 26 settembre - 3 ottobre 1994

19. S.Trini Castelli, D.Anfossi, G.Brusasca, E.Ferrero, S.Finardi, G.Tinarelli, 1995, Confronto tra parametrizzazioni della turbolenza 3D come input ai modelli di dispersione Lagrangiani a particelle in terreno complesso, LXXXI Congresso Nazionale della S.I.F. - Perugia, 2-7 ottobre 1995

20. C.Giraud, A.Longhetto, S.Alessio, L.Briatore, E.Ferrero, O.Morra, 1995, Simulazioni sperimentali in laboratorio rotante delle interazioni di flussi sinottici con le montagne, LXXXI Congresso Nazionale della S.I.F. - Perugia, 2-7 ottobre 1995

21. C.Giraud, G.Barranca, L.Briatore, E.Ferrero, A.Longhetto, 1996, Simulazione di sviluppo baroclino in vasca idrodinamica rotante. Studio dei campi di vorticita' e geopotenziale, LXXXII Congresso Nazionale della S.I.F. - Verona 23-28 settembre 1996

22. S.Trini Castelli, E.Ferrero, D.Anfossi, 1996, Simulazioni di flusso e turbolenza su una valle bi-dimensionale schematica con il modello RAMS, LXXXII Congresso Nazionale della S.I.F. - Verona 23-28 settembre 1996

23. D.Anfossi, S.Trini Castelli, E.Ferrero, G.Brusasca, G.Tinarelli, 1998, Confronto fra modelli stocastici Lagrangiani di dispersione nello strato limite convettivo basati su diverse PDF, Convegno di Meccanica Stocastica 1998, 1-3 Giugno, Lampedusa

24. L.Mortarini and E.Ferrero, 2002, Studio della dispersione relativa di traccianti passivi in atmosfera attraverso lo sviluppo di un modello Lagrangiano a due particelle, LXXXVIII Congresso Nazionale della Societa' Italiana di Fisica, Alghero 26 sett.-1 ott.

25. S. Trini Castelli, E.Ferrero, D.Anfossi, 2002, Estimation of empirical constats in turbulence closure and its application in numerical modelling, LXXXVIII Congresso Nazionale della Societa' Italiana di Fisica, Alghero 26 sett.-1 ott.

26. Ferrero E., Didelle H., Sommeria J., Giraud C., Longhetto A., Manfrin M., Mortarini L., Bertoni D., Forza R., 2003, Physical simulation of atmospheric flow and turbulence, LXXXIX Congresso Nazionale della Societa' Italiana di Fisica, Parma 17-22 sett. 2003

27. Ferrero E., Longhetto A., Montabone L., Mortarini L., Manfrin M., Sommeria J., Didelle H., Giraud C., 2004, Simulazioni dello strato limite neutrale in vasca rotante, XC Congresso Nazionale della Societa' Italiana di Fisica, Brescia 20-25 sett. 2004

28. Ferrero E., Longhetto A., Montabone L., Mortarini L., Manfrin M., Giraud C., 2005, Studio sperimentale in vasca idrodinamica rotante dello strato limite turbolento di Ekman, XCI Congresso Nazionale della Societa' Italiana di Fisica, Catania 26 sett.- 1 ott. 2005

29. Balanzino A. , Ferrero E. Valutazione modellistica dell'inquinamento fotochimico nell'Italia settentrionale. XCII Congresso Nazionale della Società Italiana di Fisica, Torino, 18 - 23 Settembre 2006

30. Ferrero E., Belfiore G. , Alessandrini S. Reazioni chimiche in modelli lagrangiani. XCII Congresso Nazionale della Società Italiana di Fisica, Torino, 18 - 23 Settembre 2006

31. Colonna N., Ferrero E. Modelli non locali per lo strato limite planetario (PBL) con chiusure di ordine elevato. XCII Congresso Nazionale della Società Italiana di Fisica, Torino, 18 - 23 Settembre 2006

32. Manfrin M., Genovese R., Longhetto A., Ferrero E., Mortarini L., Forza R. Setup sperimentale per lo studio di processi turbolenti in vasca rotante. XCII Congresso Nazionale della Società Italiana di Fisica, Torino, 18 - 23 Settembre 2006

33. Genovese R., Manfrin M., Longhetto A., Ferrero E., Mortarini L., Forza R. Simulazioni di flussi turbolenti in laboratorio idrodinamico rotante.

XCII Congresso Nazionale della Società Italiana di Fisica, Torino, 18 - 23 Settembre 2006

34. Mortarini L., Ferrero E. Studio delle fluttuazioni di concentrazione attraverso un modello "fluctuating plume". XCII Congresso Nazionale della Società Italiana di Fisica, Torino, 18 - 23 Settembre 2006

35. Elmi A., Ferrero C., Forza R., Manfrin M., Longhetto A., Ferrero E., Mortarini L, Verifica della stazionarietà dei dati di velocità acquisiti in vasca rotante. XCIII Congresso Nazionale della Società Italiana di Fisica, Pisa, 24 - 29 Settembre 2007

36. Balanzino A., Ferrero E., Pertot C., Pirovano G., Riva M., Causà M. Sviluppo di una catena modellistica per lo studio dell'inquinamento secondario su un dominio a scala regionale. XCIII Congresso Nazionale della Società Italiana di Fisica, Pisa, 24 - 29 Settembre 2007

37. A.Balanzino, C.Pertot, G.Pirovano, M.Causà, E.Ferrero, S.Alessandrini, M.P.Costa, "Simulazione dell'inquinamento fotochimico nell'Italia settentrionale" Convegno nazionale di fisica della terra fluida e problematiche affini, 11-15/06/2007, Ischia, (Poster)

38. D. Ponziani, E. Ferrero, L. Appolonia, S. Migliorini, Caratterizzazione del microclima dei monumenti in aree urbane: il caso dell'Arco di Augusto in Aosta, Convegno "Environment, including global change", Palermo 5-9 ottobre 2009.

Enrico Ferrero