

INFORMAZIONI PERSONALI



**Andrea Cappelletti**

[Tutti i campi del CV sono facoltativi. Rimuovere i campi vuoti.]

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 [andrea.cappelletti@enea.it](mailto:andrea.cappelletti@enea.it)



 +39 333 7121957

Sesso M | Data di nascita 30/11/1958 | Nazionalità Italiana

OCCUPAZIONE PER LA QUALE SI CONCORRE

Applicazione/sviluppo modelli per la simulazione numerica dei processi di advezione/diffusione/reazione in atmosfera e in mare. Analisi serie temporali

POSIZIONE RICOPERTA

Ricercatore. Applicazione/sviluppo modelli/tools per il processamento di emissioni in atmosfera

TITOLO DI STUDIO

Laurea in Ingegneria Nucleare

ESPERIENZA PROFESSIONALE

[Inserire separatamente le esperienze professionali svolte iniziando dalla più recente.]

Da 2006 a oggi

Ricercatore. Applicazione/sviluppo modelli/tools per il processamento di emissioni in atmosfera

Da 1993 a 2006

Ricercatore. Applicazione/sviluppo modelli di processo per la simulazione numerica dei processi di trasporto in mare. Analisi serie temporali

Dal 1991 al 1993

Insegnamento di materie tecniche presso scuole secondarie superiori

Dal 1987 al 1991

Analista numerico. Sviluppo modelli numerici FEM di trasporto nelle acque sotterranee e nei bacini sedimentari

ISTRUZIONE E FORMAZIONE

Da 1979 a 1986

[Inserire separatamente i corsi frequentati iniziando da quelli più recenti.]

Laurea in ingegneria Nucleare

Sostituire con il livello QEQ o altro, se conosciuto

COMPETENZE PERSONALI

[Rimuovere i campi non compilati.]

Lingua madre Italiano

Altre lingue

Inglese

COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
Ascolto	Lettura	Interazione	Produzione orale	
B2	B2	B2	B2	B2

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Livelli: A1/A2: Utente base - B1/B2: Utente intermedio - C1/C2: Utente avanzato  
[Quadro Comune Europeo di Riferimento delle Lingue](#)

Competenze professionali Modelli stocastici per dinamica di popolazione.

Competenza digitale

AUTOVALUTAZIONE				
Elaborazione delle informazioni	Comunicazione	Creazione di Contenuti	Sicurezza	Risoluzione di problemi
avanzato	avanzato	intermedio	intermedio	avanzato

Livelli: Utente base - Utente intermedio - Utente avanzato  
[Competenze digitali - Scheda per l'autovalutazione](#)

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Sostituire con il nome del(i) certificato(i) TIC

- . Conoscenza avanzata di OS unix e intermedia di windows XP/7
- . Conoscenza avanzata linguaggio di programmazione Fortran 90 con paradigma OMP

Patente di guida B

ULTERIORI INFORMAZIONI

Pubblicazioni

Bessagnet, B., et al. (2016). Presentation of the EURODELTA III intercomparison exercise-evaluation of the chemistry transport models' performance on criteria pollutants and joint analysis with meteorology. *Atmospheric Chemistry and Physics*. 16, 12667-12701. DOI Google Scholar BibTex RTF

Mircea, M., et al. (2016). Impact of grid resolution on aerosol predictions: A case study over Italy. *Aerosol and Air Quality Research*. 16, 1253-1267. DOI Google Scholar BibTex RTF

Buffoni, G., Cappelletti A., & Picco P.. (2015). On the Ekman Equations for Ocean Currents Driven by a Stochastic Wind. *Stochastic Analysis and Applications*. 33, 356-382. DOI Google Scholar BibTex RTF

M. Adani et al., *Modelling heavy metals concentrations over Italy: comparison with observations and some sensitivity tests*, ext. abst., 16th Int. Conf. on Harm. within Atm. Disp. Modelling for Reg. Purp., 8-11 Sept. 2014, Varna, Bulgaria

G. Righini et al., *GIS based assessment of the spatial representativeness of air quality monitoring stations using pollutant emissions data*, *Atm. Env.*, 97, 2014, 121-129

B. Bessagnet et al., *The EURODELTA III exercise - Model evaluation with observations issued from the 2009 EMEP intensive period and standard measurements in Feb/Mar 2009*, TTFMM & MSCW – Tech. Rep. 1/2014

G. Briganti et al., *Validation of MINNI with the Trisaia field campaign data*, poster, Cresco4 facilities inaugur., 2013

G. Righini et al., *Methodologies for the evaluation of spatial representativeness of air quality monitoring stations in Italy*, EAI 1-2/2013 Research Papers

G. Cremona et al., *Rappresentatività spaziale di misure di qualità dell'aria. Valutazione di un metodo di stima basato sull'uso di dati emissivi spazializzati*, Tech. Rep. RT/2013/2/ENEA

M. Mircea et al., *Assessment of the AMS-MINNI system capabilities to predict air quality over Italy for the calendar year 2005*, *Atm. Env.*,84,2014,178-188

M. Disidoro et al., *Study of the impact of low vs. high resolution meteorology on air quality simulations using the MINNI model over Italy*, Ext. Abs., Int. Conf. ITM 2012 NATO/SPS, Utrecht, 7-11 May, 2012

**Corsi** G. Briganti et al., *Determination of multi-year atmospheric transfer matrices for GAINS-Italy mode*, Tech. Rep. High Performance Computing on CRESCO infrastructure: research activities and results 2012

**Certificazioni** L. Ciancarella et al., *National Italian Integrated Atmospheric Model on Air Pollution: sensitivity to emission inventories*, Ext. Abs., 14<sup>th</sup> Conf. on Harm. within Atm. Disp. Modelling for Reg. Purp., 2-6 October 2011, Kos, Gree]

Course of geophysical fluid dynamics ICTP, Trieste, April 21 – May 10 1996, Italy  
Advanced course in computational and modeling aspects of oceanography. CEE. MAST program. Athens, October 3-21 1994

Abilitazione professione Ingegnere

**Dati personali** Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

**Firma**

EUROPEAN  
CURRICULUM VITAE  
FORMAT



PERSONAL INFORMATION

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Telephone **+39 50 315 3607**  
Fax **+39 50 315 3612**  
E-mail **andrea.cappelletti@enea.it**

Nationality Italy  
Date of birth 30, NOVEMBER, 1958

WORK EXPERIENCE

- Dates (from – to)
- Name and address of employer
- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

**FROM JULY 1993**

ENEA, Italian National Agency for New Technology, Energy and Sustainable Economic Development, Lungotevere Thaon di Revel, 76 - 00196 ROMA – Italy

Research and innovation activities, advanced services to public administration, enterprises and citizens

**Researcher**

From 2006: Application of numerical models for simulation of advection-diffusion-reaction processes of pollutants in atmosphere: development and application of models and tools for the processing of emission inventories and preparing model-ready emissions 2D/3D gridded data.

Main projects:

- MINNI: National Integrated Model to support the international negotiation on atmospheric pollution. Integrated model aiming at supporting air quality policy at national and regional level
- EURODELTA III Exercise: part A, field campaign analysis for 2006, 2007, 2008, 2009 years and part B, trend analysis for 1990, 2000, 2010 years
- Joint exercise ENEA-USJ on Air quality modeling over Lebanon to determine air quality over Lebanon
- ENEL Torre Valdaliga Nord power plant: air quality assessment: analysis of power plant contribution on particulate concentration

From 1998 to 2005: Application and development of numerical models for thermohaline circulation and time series analysis of meteo-marine data: study of convective processes and High Salinity Shelf Water formation

Main projects:

- PRNA 98-00 Italian Antarctica Research Project. Terra Nova Bay Mooring data analysis
- PRNA 01-03. Italian Antarctica Research Project. Terra Nova Bay Mooring data analysis
- PRNA 04-07. Italian Antarctica Research Project. Terra Nova Bay Mooring data analysis
- Coasts and Seas National Action Plan: framework agreement with the Italian Environment Ministry to address pollution of Italian seas and coasts

From 1993 to 1998: Application and development of circulation and transport in coastal marine basins. Characterizations of coastal marine environments

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

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- Name and address of employer
  - Type of business or sector
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## EDUCATION AND TRAINING

- Dates (from – to)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
  - Title of qualification awarded
- Level in national classification (if appropriate)

## PERSONAL SKILLS AND COMPETENCES

*Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.*

### MOTHER TONGUE

### OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

## SOCIAL SKILLS AND COMPETENCES

*Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.*

## ORGANISATIONAL SKILLS AND COMPETENCES

*Page 2 - Curriculum vitae of [ SURNAME, other names ]*

### Main projects:

- Orbetello lagoon (central Italy) Emergency Task: study and modeling of circulation and anoxia crisis processes in semi-closed coastal lagoons
- Envireg2 Liguria region agreement: addressing marine pollution in the Tigullio Gulf
- UE GEONET 4D project: thermohaline circulation analysis in Mediterranean Sea

### FROM 1991 TO 1993

Instruction, University and Research Ministry, Viale Trastevere, 76/a 00153 - ROMA - Italy  
Public Institution  
Teacher, secondary school  
Technical teaching and training (Electrotechnics and electrical engineering)

### FROM 1989 TO 1991

GEOMATH srl Lungarno Mediceo Pisa, Italy  
Private company  
Numerical analyst  
Development and application of FEM numerical models for groundwater transport and for formation and migration of oil in sedimentary basins

From 1978 to 1986

University of Pisa, Department of Engineering. Course of Nuclear Engineering

Dissertation on a numerical model for radioactive pollutant transport in marine coastal waters

Master degree in Nuclear Engineering

Acquired skills on population dynamics and stochastic models

Course of geophysical fluid dynamics ICTP, Trieste, April 21 – May 10 1996, Italy

Advanced course in computational and modeling aspects of oceanography. CEE. MAST program. Athens, October 3-21 1994

Qualified to practice Engineer profession

### Italian

### ENGLISH

GOOD  
GOOD  
GOOD

Ability to work in a team, which was acquired by participating in many projects

Good interpersonal skills

For more information go to  
[www.cedefop.eu.int/transparency/](http://www.cedefop.eu.int/transparency/)  
[europa.eu.int/comm/education/index\\_en.html](http://europa.eu.int/comm/education/index_en.html)  
[eurescv-search.com/](http://eurescv-search.com/)

*Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.*

**TECHNICAL SKILLS  
AND COMPETENCES**

*With computers, specific kinds of equipment, machinery, etc.*

**ARTISTIC SKILLS  
AND COMPETENCES**

*Music, writing, design, etc.*

**OTHER SKILLS  
AND COMPETENCES**

*Competences not mentioned above.*

**DRIVING LICENCE(S)**

**ADDITIONAL INFORMATION**

**Self organized skill**

External supervisor of a dissertation (University of Pisa) on a mathematical model for mariculture coastal plants

**Advanced level skill in**

unix/linux operative system in PC workstation environment

linux/LSF operative system in GRID environment

Fortran 77/90 programming with OMP paradigm

linux shell scripting

**Good level skill in**

XP/Windows7 operative system in PC environment

Excel/Access applications

Driving license B

## ANNEXES

- Bessagnet, B., et al. (2016). Presentation of the EURODELTA III intercomparison exercise-evaluation of the chemistry transport models' performance on criteria pollutants and joint analysis with meteorology. *Atmospheric Chemistry and Physics*. 16, 12667-12701. DOI Google Scholar BibTex RTF
- Mircea, M., et al. (2016). Impact of grid resolution on aerosol predictions: A case study over Italy. *Aerosol and Air Quality Research*. 16, 1253-1267. DOI Google Scholar BibTex RTF
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- M. Adani et al., *Modelling heavy metals concentrations over Italy: comparison with observations and some sensitivity tests*, ext. abst., 16th Int. Conf. on Harm. within Atm. Disp. Modelling for Reg. Purp., 8-11 Sept. 2014, Varna, Bulgaria
- G. Righini et al., *GIS based assessment of the spatial representativeness of air quality monitoring stations using pollutant emissions data*, *Atm. Env.*, 97, 2014, 121-129
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- M. Mircea et al., *Assessment of the AMS-MINNI system capabilities to predict air quality over Italy for the calendar year 2005*, *Atm. Env.*, 84, 2014, 178-188
- M. Disidoro et al., *Study of the impact of low vs. high resolution meteorology on air quality simulations using the MINNI model over Italy*, Ext. Abs., Int. Conf. ITM 2012 NATO/SPS, Utrecht, 7-11 May, 2012
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