



Francesco De Martin

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EDUCATION AND TRAINING

01/11/2022 – CURRENT

PHD IN "FUTURE EARTH, CLIMATE CHANGE AND SOCIETAL CHALLENGES" Alma mater studiorum- Università di Bologna

Field of study Dynamic Meteorology

26/06/2023 – 30/06/2023 Toulouse, France

TRAINING SCHOOL "2ND MEDCYCLONES TRAINING SCHOOL" EU Cost Action

2022 Bologna, Italy

BASIC INSTRUCTION PACKAGE FOR METEOROLOGISTS (BIP-M) World Meteorological Organization

09/2020 – 20/10/2022 Bologna, Italy

MASTER DEGREE IN PHYSICS OF THE EARTH SYSTEM Alma mater studiorum- Università di Bologna

Field of study Atmospheric Science | **Final grade** 110/110 cum laude | **Level in EQF** EQF level 7 | **Type of credits** ECTS |

Number of credits 120 |

Thesis Analysis of tornadoes on 19 September 2021 in the Po Valley using high resolution numerical simulations

29/08/2022 – 02/09/2022 Bologna, Italy

SUMMER SCHOOL "NATURE-BASED SOLUTIONS FOR HYDRO-METEO HAZARDS AND CLIMATE CHANGE ADAPTATION" Alma mater studiorum- Università di Bologna

08/2017 – 02/08/2020 Trieste, Italy

BACHELOR DEGREE IN PHYSICS Università degli studi di Trieste

Field of study Physics | **Final grade** 110/110 cum laude | **Level in EQF** EQF level 6 | **Number of credits** 180 |

Thesis Analysis of the conditions favorable to the development of severe convective events at the atmospheric mesoscale

2012 – 2017 Sacile, Italy

SCIENTIFIC HIGH SCHOOL DIPLOMA Licei G.A. Pujati

Final grade 100/100 | **Level in EQF** EQF level 4

WORK EXPERIENCE

08/03/2022 – 15/09/2022 Bologna, Italy

INTERNSHIP CNR-ISAC

Numerical simulations with a high resolution NWP model of a severe storm event in northern Italy.

Business or Sector Professional, scientific and technical activities | **Address** Via Piero Gobetti,101, Bologna, Italy

08/2019 – 09/2020 Palmanova, Italy

INTERNSHIP ARPA FVG

Study of heat transmission in the soil: analysis of experimental data and comparison with a theoretical model.

Business or Sector Professional, scientific and technical activities | **Address** Via Cairoli 14, 33057, Palmanova, Italy

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ADDITIONAL INFORMATION

RESEARCH INTEREST

Meteorology

Severe weather events, especially tornadoes, supercells, hail and downbursts. I'm also interested in NWP models (WRF, MOLOCH), urban meteorology, weather forecasting and forecast verification.

NETWORKS AND MEMBERSHIPS

14/12/2022 – CURRENT

President student section of AISAM

Memberships Co-founder of PRETEMP group

Associate member of Meteonetwork

Associate member of AISAM

DRIVING LICENCE

Driving Licence: AM

Driving Licence: B

NON PEER-REVIEW PUBLICATIONS

2023

La ricerca italiana premiata all'11° conferenza europea sui severe storms a Bucarest

Link https://aisam.eu/wp-content/uploads/2023/06/NEWSLETTER-AISAM_014_2023.pdf

2021

L'outbreak tornadico del 19 settembre 2021 sul Nord Italia

Link https://aisam.eu/wp-content/uploads/2021/12/NEWSLETTER-AISAM_008_2021.pdf

2020

Radiosondaggi di prossimità di temporali ordinari, forti ed estremi in Italia

Link http://www.pretemp.it/archivio/2020/studi_2020/studio_proximity_soudings_2020.pdf

2018

Outbreak tornadici in Calabria e Puglia il 20 e 25 novembre 2018

Link http://www.pretemp.it/archivio/2018/Studi_2018/outbreak_tornadico_calabria_puglia.pdf

2017

Il downburst

Link <http://www.pretemp.it/alterpages/files/downburst.pdf>

2016

L'errore nelle previsione dei temporali: il caso studio del 13 luglio 2016

Link <http://www.pretemp.it/alterpages/files/studio13072016.pdf>

PUBLICATIONS

A conceptual model for the development of tornado in a region with complex orography – 2023

Monthly Weather Review, in preparation

CONFERENCES AND SEMINARS

23/06/2023 – St. Gallen, Switzerland

The effect of complex orography on the development of a tornadic outbreak in the Po Valley 36th ICAM (International Conference on Alpine Meteorology)

23/05/2023 – Genova, Italy

A conceptual model for the development of tornado in the Po Valley 9th MetMed (International Conference on Meteorology and Climatology of the Mediterranean).

23/05/2023 – Genova, Italy

Toward a dedicated warning system of severe storms in Italy: the PRETEMP project 9th MetMed (International Conference on Meteorology and Climatology of the Mediterranean).

11/05/2023 – Bucharest, Romania

Toward a dedicated warning system of severe storms in Italy: the PRETEMP project 11th ECSS (European Conference on Severe Storms)

Link <https://doi.org/10.5194/ecss2023-18>

09/05/2023 – Bucharest, Romania

A conceptual model for the development of tornado in the Po Valley 11th ECSS (European Conference on Severe Storms)

Link <https://doi.org/10.5194/ecss2023-17>

14/02/2022 – 18/02/2022 – Università Statale di Milano

4th AISAM Congress Oral presentation about PRETEMP group

04/10/2019 – Istituto Cavanis, Venezia

Prevedere i temporali: una sfida per la scienza Oral presentation about severe weather forecasting

Link <https://www.ilgiornaledellaprotezionecivile.it/attualita/prevedere-i-temporali-una-sfida-per-la-scienza-a-venezia-il-1-meeting-pretemp>

21/03/2019 – Environmental Agency of the Emilia Romagna region (ARPAE), Bologna

Previsione temporali Oral presentation about severe weather forecasting

16/02/2018 – Istituto Cavanis, Venezia

Eventi meteorologici estremi. Downburst: dinamiche ed impatto economico Oral presentation about downburst forecasting

Link <http://www.venezia-meteo.net/veneziameteo/downburst.html>

TEACHING

27/05/2023

Workshop in Advanced Meteorology

Lecture about "Tornadoes: climatology, dynamics and forecasting" given to meteorologists of AMPRO (Associazione Meteo Professionisti).
Venezia, Italy.

Link <https://www.meteorprofessionisti.it/ampro-wam-primavera-2023/>

04/05/2023

Lecture in Dynamic Meteorology, University of Bologna

Lecture untitled "Multi-scale overview of vorticity: from upper level PV anomalies to tornadoes" to students enrolled in the master course of Earth System Physics at the University of Bologna (2 hours).

21/12/2022

Seminar ARPA FVG

1.5 hour of seminar to the meteorologists of the Environmental Agency of the Friuli Venezia Giulia region about tornado forecasting in the Po Valley.
Palmanova, Italy.

PERSONAL SKILLS

Communication and interpersonal skills

I've participated as a speaker in many conferences. I'm able to work in team: skill gained during the university years (in labs activities and student representations) and in the PRETEMP group.

Organization skills

Experiences in student representation both at high school and university (student representative of the Physics Department of the University of Trieste). I've co-organized some conferences (e.g. with PRETEMP, Meteonetwork).

Professional skills:

Data analysis, weather forecasting, programming in Fortran, Python and Latex, basic skills in numerical weather prediction models.

PROJECTS

07/2015 – CURRENT

PRETEMP Group composed by students and meteorologists that I co-founded in 2015 with the aim to improve severe weather forecasting in Italy. PRETEMP publishes every day a severe weather outlook for Italy, collects severe weather reports (send to the ESWD database) and publishes some reports about severe weather events in Italy. Currently the group consists of 10 members, has formal collaborations with important no-profit associations (ESSL, Meteonetwork), informal collaborations with some regional Environmental agencies (ARPAE, ARPA FVG) and with many italian amateur associations.

Link www.pretemp.it

HONOURS AND AWARDS

19/06/2023

Young Scientist Conference Award – European Meteorological Society I received an YSCA for my participation to the 36th ICAM in St. Gallen (Switzerland).

Link <https://www.emetsoc.org/awards/award-category/young-scientist-conference-awards/>

24/05/2023

Best student Oral presentation – 9th MetMed Awards Committee Best student oral presentation of the 9th International Conference on Meteorology and Climatology of the Mediterranean.

Link <https://www.metmed.eu/86600/detail/9th-international-conference-on-meteorology-and-climatology-of-the-mediterranean.html>

12/05/2023

Best ECSS Presentation Jury Award – European Severe Storm Laboratory Jury award for the best oral presentation at the 11th ECSS in Bucarest, Romania.

05/05/2023

Borghi Award – Fondazione Osservatorio Meteorologico Milano Duomo My Master thesis took the third place in that national award.

Link <https://www.fondazioneomd.it/premio-borghi>

Best master thesis – Department of Physics and Astronomy, University of Bologna Best master thesis of the Department of Physics and Astronomy of the University of Bologna during the academic years 2020-21 and 2021-22.

04/10/2021

Public competition as meteorologist in the Enviromental Agency of the Friuli Venezia Giulia region – ARPA FVG I won the competition for a permanent job as a forecaster, but I gave up that opportunity in order to continue my studies in the atmospheric field.

13/11/2020

Borghi Award – Fondazione Osservatorio Meteorologico Milano Duomo My Bachelor thesis took the second place in that national award.

HOBBIES AND INTERESTS

Sport Powerlifting, running, cycling, mountaneering, trekking.

Photography Landscape photography and severe weather photography. I've realized two time lapses: "Convection" and "Storm Motion".

Links <https://www.youtube.com/watch?v=5cx3pndXiI4> | <https://www.youtube.com/watch?v=hLcSmsMVYdA>

Bologna , 02/07/2023

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