

PERSONAL INFORMATION

**Martina Lagasio** martina.lagasio@cimafoundation.org

Sex Female | Date of birth 15/01/1990 | Nationality Italian

WORK EXPERIENCE

12/06/2017–Present

Researcher

CIMA Research Foundation, Savona (Italy)

Data assimilation in high resolution Numerical Weather Prediction models to improve forecast skill of extreme hydrometeorological events.

20/09/2016–Present

Teaching Support activities

University of Genoa, Savona (Italy)

Exercises Course of Hydraulic Structure for Engineering bachelor degree students.

26/07/2012–06/09/2012

ENI SYNDIAL S.p.A., Cengio (SV) (Italy)

Activities subsequent to the remediation work performed at the ex industrial site of ACNA of Cengio, management of the postoperam monitoring system for the development of critical skills in the interpretation of data from monitoring the same

EDUCATION AND TRAINING

01/11/2015–22/05/2019

PhD program in Computer Science and Systems Engineering

Excellent cum laude

Department of Informatics, Bioengineering, Robotics and System Engineering (DIBRIS), Genova (Italy)

Data assimilation in high resolution Numerical Weather Prediction model to improve forecast skill of extreme hydrometeorological events.

17/07/2017–26/07/2017

Summer WRF Basic and DA Tutorials

NCAR Foothills Laboratory, Boulder (Colorado)

The Basic tutorial consist of lectures on various components of the WRF modeling system along with hands-on practice sessions.

The WRFDA tutorial include lectures on a variety of topics on the full capability of the WRFDA system, along with hands-on practice sessions.

03/03/2016–15/03/2016

Training course on data assimilation

University of Reading - European Center Medium Weather Forecast (ECMWF), Reading (United Kingdom)

18/01/2016–12/06/2017

Postgraduate scholarship

CIMA Research Foundation and Department of Informatics, Bioengineering, Robotics and System Engineering (DIBRIS), Savona, Genoa (Italy)

Application of data assimilation techniques on lightning and radar data in high resolution Numerical

Weather Prediction to improve forecast skill of extreme hydrometeorological events.

20/09/2013–29/10/2015 **Master degree "Environmental & energy engineering"** 110 cum laude /110
University of Genoa, Savona (Italy)

Master Thesis title: "Lightning flash activity indices as forecasting tool of high impact weather events over complex topography""

19/07/2013 **Degree ENVIROMENTAL ENGINEERING** 110/110
University of Genoa - Campus of Savona, Savona (Italy)

Thesis:

"The remediation of a national interest site: the characterization plan to posto-peram monitoring. The case of the ex ACNA of Cengio"

04/2013 **Training course INAIL "THE HEALTH AND SAFETY IN THE WORKPLACE: MANAGEMENT SYSTEMS AND ENVIRONMENTAL IMPACT"**
INAIL, Savona (Italy)

Thesis:

"Management System of Health, Safety and Environment of a site remediation"

Related document(s): Certificate training course INAIL.pdf

09/2004–07/2009 **Scientific high school** 84/100
Scientific high school S.Giuseppe Calasanzio, Carcare (SV) (Italy)

06/2008 **First Certificate in English** Council of Europe Level B2
University of Cambridge ESOL Examination

Related document(s): Certificate First.pdf

02/07/2007–22/07/2007 **EF Language Course Certificate** Livello B1
EF Education, Eastbourne (United Kingdom)

Related document(s): Certificate English course EF.pdf

05/2006 **Preliminary English Test** Level B1
University of Cambridge (ESOL Examination)

05/2004 **KEY English test** Level A2 pass with merit
University of Cambridge (ESOL)

PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
	B2	B2	B2	B2	B2
English				FIRST	
French	A2	B1	B1	B1	A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills Good communication skills developed during the years of study

Digital skills good knowledge and mastery of the main software (Word, Excel, Access, Power point)
basic knowledge of software GIS Geomedia
basic knowledge of programming C++
good knowledge of MATLAB

ADDITIONAL INFORMATION

Publications

- Lagasio, M., A. Parodi, R. Procopio, F. Rachidi, and E. Fiori (2017), Lightning Potential Index performances in multimicrophysical cloud-resolving simulations of a back-building mesoscale convective system: The Genoa 2014 event, *J. Geophys. Res.*, 122, 4238–4257, doi:10.1002/2016JD026115.
- Lagasio, M., Silvestro, F., Campo, L., & Parodi, A. (2019). Predictive capability of a high-resolution hydrometeorological forecasting framework coupling WRF cycling 3dvar and Continuum. *Journal of Hydrometeorology*, (2019).
- Lagasio, M., Pulvirenti, L., Parodi, A., Boni, G., Pierdicca, N., Venuti, G., ... & Rommen, B. (2019). Effect of the ingestion in the WRF model of different Sentinel-derived and GNSS-derived products: analysis of the forecasts of a high impact weather event. *European Journal of Remote Sensing*, 1-18.
- Lagasio, M., Parodi, A., Pulvirenti, L., Meroni, A. N., Boni, G., Pierdicca, N., ... & Gatti, A. (2019). A Synergistic Use of a High-Resolution Numerical Weather Prediction Model and High-Resolution Earth Observation Products to Improve Precipitation Forecast. *Remote Sensing*, 11(20), 2387.

Conferences

- Lagasio, M., A. Parodi, R. Procopio, F. Rachidi, and E. Fiori (2017), The use of a potential lightning index in multi-microphysical cloud-resolving simulations of a V-shape convective system, 19th EGU General Assembly, EGU2017, proceedings from the conference held 23-28 April, 2017 in Vienna, Austria, p.13766.
- Fiori, E., M. Lagasio, A. Parodi, R. Procopio, A. Smorgonskiy, F. Rachidi, and G. Diendorfer (2016), Implementation and performance analysis of the Lightning Potential Index as a forecasting tool, proceeding of 33rd International Conf. on Lightning Protection (ICLP), Estoril, Portugal.
- Azadifar, M., M. Lagasio, E. Fiori, F. Rachidi, M. Rubinstein, R. Procopio (2016): Occurrence of Downward and Upward Flashes at the Säntis Tower: Relationship with-10 degrees C Temperature Altitude, proceeding of European Electromagnetics International Symposium EUROEM 2016, London, UK, July 11-14, 2016.
- Lagasio, M., E. Fiori, and A. Parodi (2018), Dealing with uncertainty in V-shape back-building Mesoscale Convective Systems: sensitivity analysis on cycling 3dvar radar data assimilation for the Genoa 2014 case. In HyMeX conference, Lecce 29 May - 2 June 2018, Italy.
- Fiori, E., M. Lagasio, and A. Parodi (2018), Dealing with uncertainty in V-shape back-building Mesoscale Convective System high resolution modelling over the Ligurian Sea. In HyMeX conference, Lecce 29 May - 2 June 2018, Italy.
- Goga, K., Pilosu, L., Parodi, A., Lagasio, M., & Terzo, O. (2018, July). Performance of WRF Cloud Resolving Simulations with Data Assimilation on Public Cloud and HPC Environments. In Conference on Complex, Intelligent, and Software Intensive Systems (pp. 161-171). Springer, Cham.
- Pulvirenti, L., A. Parodi, M. Lagasio, N. Pierdicca, F.S. Marzano, C. Riva, G. Venuti, E. Realini, E. Passera (2018), Use of Sentinel-1 and Sentinel-3 data to initialize a numerical weather model. In X

Conference of the Italian Society of Remote Sensing (AIT2018), Firenze 4-6 July 2018, Italy.

- Parodi, A., L. Pulvirenti, M. Lagasio, N. Pierdicca, F.S. Marzano, C. Riva, G. Venuti, L. Pilosu, E. Realini, E. Passera, B. Rommen (2018), Ingestion of Sentinel-derived Remote Sensing Products in Numerical Weather Prediction Models: First Results of the ESA STEAM Project. In International Geoscience and Remote Sensing Symposium, Valencia, 22-27 July 2018, Spain.
- Pulvirenti L., A. Parodi, M. Lagasio, N. Pierdicca, G. Venuti, E. Realini, A. Gatti, S. Barindelli, E. Passera, B. Rommen (2018), Incorporating Sentinel-derived products into numerical weather models: the ESA STEAM project. SPIE Remote Sensing 2018, Berlin 10-13 September 2018.

ATTACHMENTS

- Certificate First.pdf
- Certificate English course EF.pdf
- Certificate training course INAIL.pdf

Certificate First.pdf

**English for Speakers of Other Languages****Cambridge ESOL Level 1 Certificate in ESOL International***

This is to certify that

MARTINA LAGASIO

has been awarded

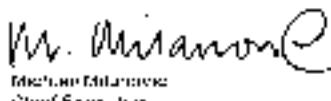
Grade C

in the

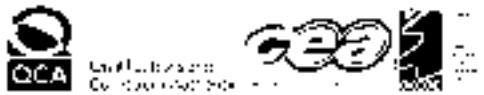
First Certificate in English

Council of Europe Level B2

Date of Examination: JUNE 2009
Place of Entry: LA SPEZIA
Reference Number: 081102B0253
Assessment Number: 601127051
*This award refers to the ECA National Curriculum Framework


Martina Lagasio
Chief Executive

Date of Issue: 05/09/09
Certificate Number: 0821190254



Certificate English course EF.pdf

Language Course Certificate

EF English Language

MARTINA LAGASIO

2018-01-22 2018-04

B1

2018-01-29

ENGLISH SCARNE

Martina Lagasio

Certificate training course INAIL.pdf



INAIL
Direzione Regionale Liguria
Sede di Savona



Università degli Studi di Genova
Istituto Nazionale per l'Assicurazione contro gli Infortuni sul Lavoro

S.P.E.S. S.c.p.A.

Corso di Formazione

"LA TUTELA DELLA SALUTE E LA SICUREZZA NEGLI AMBIENTI DI LAVORO: SISTEMI DI GESTIONE ED IMPATTO AMBIENTALE"

Attestato di Frequenza

Si attesta che la Sig.ra LAGASIO MARTINA ha frequentato
e portato a termine con profitto il Corso di Formazione
"LA TUTELA DELLA SALUTE E LA SICUREZZA NEGLI
AMBIENTI DI LAVORO: SISTEMI DI GESTIONE ED
IMPATTO AMBIENTALE" della durata complessiva di 60 ore,
tenutosi presso il Campus Universitario Savona.

Savona, 23/9/2013

UNIGE
Magnifico Rettore


INAIL
Direttore Sede di Savona


SPES
Presidente