# Giulio Bongiovanni

#### WORK EXPERIENCE

ISAC - CNR - TORINO, ITALY

**RESEARCH FELLOW** - 01/11/2019 - 30/06/2021

Downscaling of climate variables over the Mediterranean area, development of a modelling-chain for seasonal forecast of snow variables, seasonal forecasts over the Alps, climate data analysis.

INAF - ASTROPHYSICAL OBSERVATORY - PINO TORINESE, ITALY

**STAGE** - 17/08/2015 - 22/09/2015

Data analysis of simulations related to the study of accretion disks by using the IDL language and the Visit software.

#### EDUCATION AND TRAINING

01/11/2021 - 26/03/2025 Trento, Italy

#### PH.D. IN SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE IUSS Pavia

PhD Thesis: "Assessment of climate changes in the Extended European Alpine Region based on the novel EEAR-CLIM

dataset"

Supervisor: Dino Zardi

Co-Supervisor: Bruno Majone

Main courses: astronomical effects on earth climate; challenges and open questions in earth system and

environmental sciences; future projections and the IPCC report; from global to convection-permitting models; climate

dynamics and change.

Level in EQF EQF level 8

18/06/2020 - 19/06/2020

#### **SNOWPACK MODEL COURSE** ARPA Piemonte

09/2016 - 07/2019 Torino, Italy

# MASTER'S DEGREE IN PHYSICS - CURRICULUM ENVIRONMENTAL PHYSICS Università degli Studi di Torino

Master Thesis: "Meteorological WRF Simulations of a Pollution Event over the Aosta Valley" 109/110

Supervisor: Silvia Ferrarese

Co-Supervisor: Alessio Golzio, Henri Diemoz

Main courses: physics of the atmosphere, meteorology, paleoclimatology, Fortran programming, complements of

physics and maths, environmental geology, neural networks

Level in EQF EQF level 7

09/2011 - 04/2016 Torino, Italy

#### BACHELOR'S DEGREE IN PHYSICS Università degli Studi di Torino

Bachelor Thesis: "Climatological Analysis of the Temperature at the Alpine Site of Plateau Rosa (3480 m)"

*Supervisor:* Silvia Ferrarese

Co-Supervisor: Francesco Apadula

Main courses: calculus, statistics, climate physics, C++ and Java programming, classical and modern physics,

astrophysics and cosmology.

Level in EQF EQF level 6

#### LANGUAGE SKILLS

Mother tongue(s): ITALIAN

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production Spoken interaction		
ENGLISH	B1	B2	B2	B2	B2
FRENCH	A2	B1	B1	A2	B1

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

#### SKILLS

Microsoft Office | R | Python | MATLAB | C++ | LaTeX | FORTRAN | Bash | Numerical Simulations using Weather Research and Forecasting (WRF) model | NCL | COBOL | Windows | Snowpack | CDO (climate data operators) | Linux | Machine Learning

#### PUBLICATIONS

2025

EEAR-Clim: A high density observational dataset of daily precipitation and air temperature for the Extended European Alpine Region

Bongiovanni, G., Matiu, M., Crespi, A., Napoli, A., Majone, B., and Zardi, D.: EEAR-Clim: a high-density observational dataset of daily precipitation and air temperature for the Extended European Alpine Region, Earth Syst. Sci. Data, 17, 1367–1391, https://doi.org/10.5194/essd-17-1367-2025, 2025.

2023

# Seasonal forecasting of snow resources at Alpine sites

Terzago, S., Bongiovanni, G., and von Hardenberg, J.: Seasonal forecasting of snow resources at Alpine sites, Hydrol. Earth Syst. Sci., 27, 519-542, 2023. https://doi.org/10.5194/hess-27-519-2023.

2022

# Co-design of sectoral climate services based on seasonal prediction information in the Mediterranean

Sánchez-García E., Rodríguez-Camino E., Bacciu V., Chiarle M., Costa-Saura J., Nieves Garrido M., Lledó L., Navascués B., Paranunzio R., Terzago S., Bongiovanni G., Mereu V., Nigrelli G., Santini M., Soret A., von Hardenberg J. Co-design of sectoral climate services based on seasonal prediction information in the Mediterranean, Climate Services, 28, 100337, ISSN 2405-8807, 2022. https://doi.org/10.1016/j.cliser.2022.100337.

2020

# MilestoneM3.2 - High-quality climate prediction data available to WP4.

Terzago S, Bongiovanni G, Von Hardenberg J. MilestoneM3.2 - High-quality climate prediction data available to WP4. Report for MEDSCOPE Project, 2020. Available on "https://www.medscope-project.eu/products/data/"

#### CONFERENCES & SEMINARS

07/09/2025 - 12/09/2025 Lubiana (Slovenia)

# **European Meteorological Society (EMS) Annual Meeting 2025**

Oral presentation: "EEAR-Clim: A high density stations-based dataset of daily meteorological data for the Extended European Alpine Region"

10/04/2025 - 11/04/2025 Online

# 4th MeteoXchange ECS conference

Poster presentation: "Assessment of air temperature and precipitation changes in the Extended Alpine Region over 1961-2020"

# Sustainable Development and Climate Change (SDC) Conference

Oral and poster presentation: "Assessment of climate changes in the Extended European Alpine Region"

02/09/2024 - 06/09/2024 Barcelona (Spain)

#### **European Meteorological Society (EMS) Annual Meeting 2024**

Invited Talk: "Climate-trend analysis of air temperature and precipitation in the Extended Alpine Region (1961-2020)"

14/04/2024 - 19/04/2024 Wien (Austria)

# **European Geosciences Union (EGU) General Assembly 2024**

Oral presentation: "A new dataset of daily observations from a dense network of weather stations covering the Extended Alpine Region"

22/11/2023 - 24/11/2023 Milan (Italy)

#### SISC 11th Annual Conference

Poster presentation: "A new dataset of daily observations from a dense network of weather stations covering the Extended Alpine Region"

19/06/2023 - 27/06/2023 St. Gallen (Switzerland)

#### ICAM 2023 - 36th International Conference on Alpine Meteorology

Poster presentation: "A new dataset of daily observations from a dense network of weather stations covering the Extended Alpine Region"

22/05/2023 - 24/05/2023 Genova (Italy)

### MetMed - 9th International Conference on Meteorology and Climatology of the Mediterranean

Poster presentation: "A new dataset of daily observations from a dense network of weather stations covering the Extended Alpine Region"

09/05/2023 – 11/05/2023 Budapest (Hungary)

# 11th Seminar for Homogenization and Quality Control in Climatological Databases and 6th Interpolation Conference jointly organized with the 14th EUMETNET Data Management Workshop

Oral presentation: "Preliminary results on a new dataset of daily observations from a dense network of weather stations covering the Extended Alpine Region"

11/04/2022 - 11/04/2022 Trento (Italy)

#### Cambiamenti climatici, il contributo della ricerca in Trentino

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21/06/2021 - 21/06/2021 online

#### **MEDSCOPE Final General Assembly**

Seasonal forecasts of mountain snow depth and glacier evolution for water management

21/10/2020 - 23/10/2020 online

#### SISC 8th Annual Conference

Seasonal prediction of mountain snow depth. An application in the Alps.

04/05/2020 - 08/05/2020 online

#### **European Geosciences Union (EGU) General Assembly 2020**

Seasonal prediction of mountain snow resources: an application in the Alps.

02/09/2019 - 06/09/2019 Riva del Garda (Italy)

# ICAM 2019 - 35th International Conference on Alpine Meteorology

Air pollution exchange between the Po basin and the north-western Alps, a test bench for NWP and chemical transport models over complex terrain

# DRIVING LICENCE

**Driving Licence: B** 

#### PROJECTS

01/11/2019 - 30/06/2021

# **MEDSCOPE Project**

Downscaling of seasonal forecast data over the Mediterranean area, developement of climate data analysis utilities, snowpack modelling

#### HONOURS AND AWARDS

11/04/2025

# MeteoXchange Outstanding Poster Award - MeteoXchange

Poster presentation: "Assessment of air temperature and precipitation changes in the Extended Alpine Region over 1961-2020"

# COMMUNICATION AND INTERPERSONAL SKILLS

#### Communication and interpersonal skills

• good communication skills gained through previous experiences and conferences presentations

#### ORGANISATIONAL SKILLS

# **Organisational skills**

- research-oriented mind, acquired during research fellow and PhD periods
- gained expertise on data analysis, study of time series and object-oriented programming during my studies
- responsibility and organization in the work, communication, precision and pressure management gained during my previous work experiences

#### PEER REVIEW

Peer reviewer for Earth System Science Data

15/04/2025

Giulio Bongiovanni