

Curriculum vitae **Renato R. Colucci, PhD**

Degrees: M.Sc., Ph.D.

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Personal Research Institute web page:

<https://www.isp.cnr.it/index.php/it/chiamo/personale/item/401-colucci-renato-r>

Personal web page:

<http://rrcolucci.wixsite.com/rrcolucci>

Education

Ph.D in Environmental Sciences (Physical, Marine and Coastal Environment)

[University of Trieste (2011-2013) – 3 months staying at UNIS (Svalbard)

Title: *Evidence of recent and holocene evolution of the cryosphere in Friuli Venezia Giulia (north-eastern Italian Alps)*

Supervised by Prof. Mauro Guglielmin, Dr. Furio Finocchiaro and Dr. Emanuele Forte ; Examined by Prof. Valter Maggi and Prof. Giovanni Zanchetta

M.Sc. in Geology, score 105/110

[University of Trieste (2008)

Dissertation: *Caratterizzazione e frequenza degli eventi di precipitazione intensa a Cividale del Friuli (1920-2007) (Characterization and frequency of severe precipitation events, Cividale del Friuli (Italy, 1920-2007))*

Supervised by Prof. Franco Cucchi and Prof. Franco Stravisi

Job and qualifications

(2020-present)- qualification

Italian Ministry of University and Research (MIUR)

National Scientific Habilitation as Full Professor (IT Ordinario - UK/USA Professor)

(2020-present)- job

National Research Council, Institute of Polar Sciences (ISP)

Scientist – Research activity in glaciology, glacial and periglacial geomorphology, climatology, paleoclimatology, cryosphere-atmosphere interactions

(2001-2020)- job

National Research Council, Department of Earth System Sciences and Environmental Technology (ISMAR)

Permanent staff CTER - Management of meteorological networks and climatology. Research activity devoted to the study of high-altitude and high latitude glacial and periglacial environments both in the Alps (Eastern Alps, Dolomites, Stelvio, Austria, Slovenia, Switzerland) and outside Europe (Cordillera Andina – Chile, Karakorum-Pakistan, Antarctica) and their interactions with the climate.

(2016-present)- qualification

Italian Ministry of University and Research (MIUR)

National Scientific Habilitation as Associate Professor (IT Associato - UK Senior lecturer)

(2016-present)- job

University of Trieste, Department of Mathematics and Geoscience
Adjunct Professor in glaciology

Research Interests

Glacial and periglacial geomorphology, glaciology, climatology, paleoclimatology, reconstruction of climatological records, photogrammetry applications also with drones, permanent ice deposits in caves (ice-caves), geophysical applications in glacial and periglacial environments, weather/climate observation and monitoring with a special focus on high elevated alpine areas, quaternary geology, GIS, scientific dissemination activity.

Activities

- Guest Editor of the Special Issue Interactions between the Cryosphere and Climate (Change) MDPI – Atmosphere, section climatology
- Scientific Editor of the international Springer Journal “[Journal of Mountain Science](#)” (IF 2017 1.135)
- Topical Editor of the international open-access proceedings journal “[Advance in Science and Research](#)”
- Research in the fields of glacial and periglacial geomorphology in the central and southeastern Alps having as main object the paleoclimatic interpretation of the Holocene.
- Research in the field of periglacial geomorphology in polar areas (mainly Antarctica) having as object the interactions between the cryosphere (focus on permafrost) and the climate system.
- Teaching at [Master](#) (Glaciology, University of Trieste) and [Doctorate level](#) (Glaciology, University of Trieste & Cà Foscari University in Venice)
- Planner and Responsible of the high altitude weather stations of Mount Canin jointly with the Natural Park of Prealpi Giulie
- Planner and Responsible of the Karstic Climatological Observatory of Borgo Grotta Gigante (Trieste, Italy)
- Responsible for the [meteomarine weather network](#) at ISMAR-CNR Trieste
- Chief Editor of the semiannual journal of UMFVG “[Meteorologica](#)” (ISSN 1827-3858)
- Organizers of several conferences and meeting (also at international level) having as object the topic of climate change and its relation with the physical environment
- Strong background in scientific dissemination activity both at national and international level

Fieldwork Experience

I have successfully projected and executed research programs in the south-eastern European Alps having as object the study of the cryosphere and its interactions with the climate. I also took part to several expeditions in polar and different mountain areas in the world. Field research undertaken includes glacier mass balance measurements, GPS and theodolite surveys, geophysical surveys by using ground penetrating radar (GPR) and electrical resistivity tomography (ERT), drone photogrammetry and survey, ground based photogrammetry, ice drilling and coring, deployment of automatic weather station (AWS) in high elevated mountains, geomorphological mapping, microclimatological surveys in permanent cave ice deposits and permafrost environment (active layer, Rock Glaciers). I feel confident leading field groups on any of the topics and areas in which I have experience.

Scientific expeditions (5)

- **Grand Combin**, CH (Oct 2016). Geophysical and glaciological surveys, Grand Combin glacier (4170 m asl) Project “Protecting Ice memory”
https://www.youtube.com/watch?v=nMCxYeYxO8g&spfreload=10&fbclid=IwAR0VL1uOLTgffeqqyn19KPB6cg0UIOpeMHyyBQVlrR2x_L1CnmgBJUgko3E
- **Antarctica** (Feb-Apr 2016 and Jan-Mar 2015). Geomorphological mapping and geophysical surveys at Signy Island, British Antarctic Survey (BAS) station.
- **Pakistan - Karakorum** (May-Jun 2013) – Geophysical surveys in periglacial areas of Deosai National Park and Baltoro. EvK2 CNR
- **Chilean Andes** (Feb-Apr 2012) – Geophysical surveys over some debris covered glaciers and rock glaciers in the Central Cordillera. EvK2 CNR

Planning and realization of scientific facilities also in remote areas

(2007)

[Karst Climatological Observatory](#)

Realization of the renovated Long-term monitoring site of Borgo Grotta Gigante (Trieste) as a permanent observatory dedicated to the collection of main meteorological parameters (Active since 1967)

(2011)

[Leupa Ice-cave laboratory](#)

Realization of an advanced monitoring site for the monitoring of rock-, air-, and ice-temperature in a remote karstic cave located at 2300 m asl

(2012)

[Canin Automatic Weather Station](#)

Realization of a high-altitude weather station in the Eastern Alps (Mount Canin massif) located in the premises of glacial remnants of Canin glacier at 2203 m asl

(2019)

[Canin Ice Caves Laboratory \(CICL\)](#)

Realization of a temperature monitoring network in different remote karstic caves with permanent ice deposits inside them with the goal of characterizing the internal dynamics of such complex cave system where ice formation is (was) favoured

Teaching Experience

(2019-2020)

ADJUNCT PROFESSOR: Dept. of Mathematics and Geoscience, Trieste University

- **Glaciology** (56 hours, Master Course in Geoscience) 6 CFU/ECTS (4 ECTS lectures , 1 ECTS laboratory, 1 ECTS fieldwork and excursion)

(2019)

VISITING PROFESSOR **Physical Geography and Geomorphology course** (36 hours)

University of Ljubljana (Slovenia), Faculty of Arts Department of Geography

(2019)

LECTURER: **Glaciology** course (8 hours):
PhD in Science and Management of Climate Change (Ca' Foscari University Venice)
<http://www.phdfluidmechanics.units.it/content/glaciology>

(2018-2019)

ADJUNCT PROFESSOR: Dept. of Mathematics and Geoscience, Trieste University

- **Glaciology** (56 hours, Master Course in Geoscience) 6 CFU/ECTS (4 ECTS lectures, 1 ECTS laboratory, 1 ECTS fieldwork and excursion)

(2017-2018)

VISITING PROFESSOR: Faculty of Geoscience, Dept. of Geography, Bochum University (Germany)

- **Glaciology** (12 hours; B.Sc., Ma.Sc and PhD level) April 2nd – 6th, 2018. Staff mobility for teaching. Erasmus+, Higher Education Mobility Agreement between the University of Trieste (Italy) and the University of Bochum (Germany).

(2017-2018)

ADJUNCT PROFESSOR: Dept. of Mathematics and Geoscience, Trieste University

- **Glaciology** (56 hours, Master Course in Geoscience) 6 CFU/ECTS (4 ECTS lectures, 1 ECTS laboratory, 1 ECTS fieldwork and excursion)

(2017)

LECTURER: **Glaciology** course (4 hours), held jointly for:
PhD in Earth Science, Fluid Dynamics, and Mathematics (University of Trieste)
PhD in Science and Management of Climate Change (Ca' Foscari University Venice)
<http://www.phdfluidmechanics.units.it/content/glaciology>

(2016-2017)

ADJUNCT PROFESSOR: Dept. of Mathematics and Geoscience, Trieste University

- **Glaciology** (56 hours, Master Course in Geoscience) 6 CFU/ECTS (4 ECTS lectures, 1 ECTS laboratory, 1 ECTS fieldwork and excursion)

(2016)

LECTURER: **Glaciology** course (8 hours), *Doctorate School of Earth Science and Fluid Mechanics*
<http://www.phdfluidmechanics.units.it/content/glaciology>

(2015-2016)

ADJUNCT PROFESSOR: Dept. of Mathematics and Geoscience, Trieste University

- **Glaciology** (60 hours, Master Course in Geoscience) 6 CFU/ECTS (4 ECTS lectures, 1 ECTS laboratory, 1 ECTS fieldwork and excursion)

(2015)

LECTURER: **Glaciology** course (8 hours), *Doctorate School of Earth Science and Fluid Mechanics*
<http://www.phdfluidmechanics.units.it/content/glaciology>

(2013-2014)

LECTURER: **Fieldwork training in glaciology**, Dept. of Mathematics and Geoscience, Trieste University

- 2 years long field-course training on glacier mass balance, glaciological surveys, geophysical surveys, glacier–climate interactions, snow properties and avalanches, geomorphological surveys in glacial and periglacial environment for bachelor students. (6 ECTS, 150 hours)

(2012-2013)

LECTURER: **Fieldwork training in glaciology**, Dept. of Mathematics and Geoscience, Trieste University

- 2 years long field-course training on glacier mass balance, glaciological surveys, geophysical surveys, glacier–climate interactions, snow properties and avalanches, geomorphological surveys in glacial and periglacial environment for bachelor students. (6 ECTS, 150 hours)

(2011-2012)

- LECTURER:** **Fieldwork training in glaciology**, Dept. of Mathematics and Geoscience, Trieste University
- 2 years long field-course training on glacier mass balance, glaciological surveys, geophysical surveys, glacier–climate interactions, snow properties and avalanches, geomorphological surveys in glacial and periglacial environment for bachelor students. (6 ECTS, 150 hours)

(2011-2013)

- LECTURER:** Geology course, Dept. Mathematics and Geoscience, Trieste University
- Preparing and delivering seminars on glacial and periglacial environment, glacier mass balance, glacier –climate interactions, permafrost geomorphology

(2011-2013)

- LECTURER:** Quaternary Geology course, Dept. Mathematics and Geoscience, Trieste University
- Preparing and delivering seminars on glacial and periglacial environment, glacier mass balance, glacier –climate interactions, permafrost geomorphology, meteorology and climatology of cold environments

(2005-2009)

- LECTURER:** Master in Science Communication, International School for Advance Studies (SISSA), Trieste
- Preparing and delivering seminars on Communication of Science in regards to meteorological and climatological informations

Projects

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- **IPECA – Interactions between permafrost and ecosystems in Continental Antarctica**
2020-2022 → PNRA18_00186-E
 - **Past Climate Change and Glaciation at the Alps-Dinarides junction**
2020-2023 → Slovenian Research Agency (ARRS) – J1 – 2479 - Participant
 - **ADRIACLIM – Participant (Contributions to activities WP 3.1, 3.4, 4.4 & 5.3)**
2020-2022 Climate change information, monitoring and management tools for adaptation strategies in Adriatic coastal areas - Interreg V-A Italy-Croatia CBC Programme 2014-2020
 - **Dating Glacial Landforms by Cosmogenic Nuclides (Slovenian research Agency: BI-TR/18-21-003)**
2019-2021 A synthesis of paleoclimate from Slovenia to Turkey - **Research cooperation**
 - **ChangeWeCare - Participant (Contact person for ISMAR, WP3.1 & 4.4)**
2019-2021 [Climate Challenges on Coastal and Transitional Changing Areas: Weaving a Cross-Adriatic Response](#). Interreg Italy-Croatia
 - **CHANGE - H2020-Marie Sklodowska Curie Action-IF-2017-793403**
2018-2020 [Climate, Hydrology ANd Alpine GlaciErs](#) – Logistic and Research cooperation as geomorphologist and glaciologist
 - **Climate Change impacts in the FVG territory, Italy (DGR n. 1890-2016)– Participant and Coordinator**
2017 Climate Change impacts on Friuli Venezia Giulia (Italy) territory (Impatti dei cambiamenti climatici sul territorio del Friuli Venezia Giulia)
 - **PRIN (Italian Research Projects of National Interests) 2015N8F555 - Participant**
2017-2019 RESACC, Response of sensitive alpine ecosystems to climate change (Risposte di ecosistemi sensibili alpini ai cambiamenti climatici)
 - **PNRA (Italian National Antarctic Program)– Participant**
Call 2016 (Line B), 2016-2018 Impacts of Climate Change on vegetation-permafrost ecosystems in maritime Antarctica and Antarctic Peninsula

- [Ice Memory](#) – External participant
- 2016 First Grand Combin Expedition (CH)
- [C3-Caves's Cryosphere and Climate](#) – Lead Partner and scientific coordinator
- 2016-2019 (ice caves surveying, monitoring and studying in high altitude alpine karstic terrain)
- [MACRY-FVG](#) – Scientific Partner
- 2014-16 (characterization and monitoring of **MA**ritime **CRY**osphere in the southeastern Alps, FRA 2014 grant – University of Trieste)
- [PNRA \(Italian National Antarctic Program\)](#) - Participant
- 2013-15/**C1.01** Impact of climate change on vegetation and permafrost: interactions, feedbacks and meaning for biodiversity in maritime Antarctica
- [NEXT DATA Project of Strategic Interest](#) – external cooperation
- WP 1.4** Environment and climate data from non-polar ice cores
- [MONICA](#) – Scientific Partner
- 2012-14 integrated **MON**itoring of Ice within Caves, FRA 2012 grant – University of Trieste
- [JERICO-FP7](#) - Operator
- 2011-2014 Towards a joint European research infrastructure network for coastal observatories, FP7
- [ADRIAMET](#) – Scientific coordination for **ISMAR-CNR**
- 2009-2010 Meteorology for sailing in the Adriatic Sea. Project funded by the European Union with F.E.S.R. (European Fund for Regional Development), Interreg IIIA Adriatic Crossborder

Papers published in international peer reviewed journals (29)

See also:

personal **Scopus page** - *H* index 11 (December 2019)

<https://www.scopus.com/authid/detail.uri?authorId=7003357799>

personal **Google Scholar page** - *H* index 13 (November 2020)

<https://scholar.google.it/citations?user=Yx9afNoAAAAJ&hl=it>

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- 29 Žebre M., **Colucci R.R.**, Giorgi F., Glasser N.F., Racoviteanu A.E., Del Gobbo C. (2020) 200 years of Equilibrium-Line Altitude variability across the European Alps (1901–2100). **Climate Dynamics**
<https://doi.org/10.1007/s00382-020-05525-7>
- 28 Petrini M., Colleoni F., Kirchner N., Hughes A.L.C., Camerlenghi A., Rebesco M., Lucchi R-G., Forte E., **Colucci R.R.**, Noormets R. (2020) Oceanic conditions driving the last deglaciation of the Barents Sea ice sheet: results from an ensemble of transient ice sheet model simulations. **Quaternary Science Reviews**. 238, 106314
<https://doi.org/10.1016/j.quascirev.2020.106314>
- 27 Diolaiuti G.A., Azzoni R.S., D'Agata C., Maragno D., Fugazza D., Vagliasindi M., Mortara G., Perotti L., Bondesan A., Carton A., Pecci M., Dinale R., Trenti A., Casarotto C., **Colucci R.R.**, Cagnati A., Crepez A., Smiraglia C. (2019) *Present extent, features and regional distribution of Italian glaciers* **La Houille Blanche** 5-6, 159-175
<https://www.shf-lhb.org/articles/lhb/abs/2019/04/lhb160037/lhb160037.html>
- 26 Santin I., **Colucci R.R.**, Žebre M., Pavan M., Cagnati A., Forte E. (2019) Recent evolution of Marmolada glacier (Dolomites, Italy) by means of ground and airborne GPR surveys **Remote Sensing of the Environment** 235, 111442
<https://www.sciencedirect.com/science/article/pii/S0034425719304614>
- 25 Raicich F., **Colucci R.R.** (2019) *A near-surface sea temperature time series from Trieste, northern Adriatic Sea (1899-2015)* **Earth System Science Data** 11, 761-768
<https://www.earth-syst-sci-data.net/11/761/2019/>

- 24 Colucci R.R., Guglielmin M. (2019) *Climate change and rapid ice melt; suggestions from abrupt permafrost degradation and ice melting in an alpine ice cave*. **Progress in Physical Geography**, 43: 4, 561-573
<https://doi.org/10.1177/0309133319846056>
- 23 Forte E., Basso Bondini M., Bortoletto A., Dossi M., Colucci R.R. (2019) *Pros and cons in helicopter-borne GPR data acquisition on rugged mountainous areas: critical analysis and practical guidelines*. **Pure and Applied Geophysics**
<https://link.springer.com/article/10.1007/s00024-019-02196-2>
- 22 Boccali C., Žebre M., Colucci R.R. (2019) *Geometry and paleo-ice content of rock glaciers in the southeastern Alps (NE Italy - NW Slovenia)* **Journal of Maps**, 15-2, 346-355.
<https://www.tandfonline.com/doi/full/10.1080/17445647.2019.1595753>
Suppl. Material (1 map)
<https://www.tandfonline.com/doi/suppl/10.1080/17445647.2019.1595753?scroll=top>
- 21 Bertozzi B., Pulvirenti B., Colucci R.R., Di Sabatino S. (2019) *On the interactions between airflow and ice melting in ice caves: A novel methodology based on computational fluid dynamics modeling* **Science of The Total Environment**, 669: 322-323 <https://doi.org/10.1016/j.scitotenv.2019.03.074>
- 20 Colucci R.R., Forte E., Žebre M., Maset E., Zanettini C., Guglielmin M. (2019) *Is that a relict rock glacier?* **Geomorphology**, 330; 177-189
<https://doi.org/10.1016/j.geomorph.2019.02.002>
- 19 M. Oliva, M. Žebre, M. Guglielmin, P.D. Hughes, A. Çiner, G. Vieira, X. Bodin, N. Andrés, R.R. Colucci, C. García-Hernández, C. Mora, J. Nofre, D. Palacios, A. Pérez-Alberti, A. Ribolini, J. Ruiz-Fernández, M.A. Sarıkaya (2018) *Permafrost conditions in the Mediterranean region since the Last Glaciation*. **Earth Science Reviews**, 185: 397-4.6
<https://www.sciencedirect.com/science/article/pii/S0012825218301181>
- 18 Petrini M., Colleoni F., Kirchner N., Hughes L.C.A., Camerlenghi A., Rebesco M., Lucchi R.G., Forte E., Colucci R.R., Noormets R. (2018) *Interplay of grounding-line dynamics and sub-shelf melting during the last retreat of Bjørnøyrenna Ice Stream*. **Scientific Reports, Nature**, 8: 7196
<https://www.nature.com/articles/s41598-018-25664-6>
- 17 Kozamernik E, Colucci R.R., Stepišnik U., Forte E., Žebre M., (2018) *Spatial and climatic characterization of three glacial stages in the Upper Krnica Valley, SE European Alps*. **Quaternary International**, 470:A 67-81
<http://www.sciencedirect.com/science/article/pii/S1040618217302847>
- 16 Colucci R.R., Luetscher M., Forte E., Guglielmin M., Lanza D., Princivalle F., Vita F., (2017) *First alpine evidence of in situ coarse cryogenic cave carbonates (CCC_{coarse})* **Geografia Fisica & Dinamica Quaternaria**, 40:1 53-59
https://gfdq.glaciologia.it/040_1_05_2017
- 15 Colucci R.R., Giorgi F., Torma C. (2017). *Unprecedented heat wave in December 2015 and potential for winter glacier ablation in the eastern Alp*. **Scientific Reports, Nature**, 7: 7090
<https://www.nature.com/articles/s41598-017-07415-1>
- 14 Colucci R.R., Žebre M. (2016) *Late Holocene evolution of glaciers in the southeastern Alps* **Journal of Maps**, 12: 289-299. doi: 10.1080/17445647.2016.1203216
<http://www.tandfonline.com/doi/full/10.1080/17445647.2016.1203216>
Suppl. material (2 Maps) <http://www.tandfonline.com/doi/suppl/10.1080/17445647.2016.1203216?scroll=top>
- 13 Del Gobbo C., Colucci R.R., Forte E., Triglav Čekada M., Zorn M. (2016) *The Triglav Glacier (South-Eastern Alps, Slovenia): Volume Estimation, Internal Characterization and 2000–2013 Temporal Evolution by Means of Ground Penetrating Radar Measurements*. **Pure and Applied Geophysics**, 173-8: 2753-2766
<http://link.springer.com/article/10.1007/s00024-016-1348-2>
- 12 Colucci R.R., Boccali C., Žebre M., Guglielmin M. (2016) *Rock glaciers, proglacial ramparts and pronival ramparts in the south-eastern Alps*. **Geomorphology**, 269: 112-121
<http://www.sciencedirect.com/science/article/pii/S0169555X16305232>
- 11 Zhao W., Forte E., Colucci R.R., Pipan M. (2016) *High-resolution glacier imaging and characterization by means of GPR attribute analysis* **Geophysical Journal International**, 206: 1366-1374
<http://gji.oxfordjournals.org/content/206/2/1366.full?sid=fb6f5887-91ab-48bb-b16a-bca58000662f>
- 10 Colucci R.R., Fontana D., Forte E., Potleca M., Guglielmin M. (2016). *Response of ice caves to weather extremes in the Southeastern Alps, Europe*. **Geomorphology**, 261: 1-11
<http://dx.doi.org/10.1016/j.geomorph.2016.02.017>

- 9 **Colucci R.R. (2016).** *Geomorphic influence on small glacier response to post Little Ice Age climate warming: Julian Alps, Europe.* **Earth Surface Processes and Landforms**, 41: 1227-1240
<http://onlinelibrary.wiley.com/doi/10.1002/esp.3908/abstract>
- 8 Žebre M., Stepisnik U., **Colucci R.R.**, Forte E., Monegato G. (2016). *Evolution of a karst polje influenced by glaciation: the Gomance piedmont polje (northern Dinaric Alps).* **Geomorphology**, 257: 143-154
<http://www.sciencedirect.com/science/article/pii/S0169555X16300071>
- 7 **Colucci R.R.**, Guglielmin M. (2015) *Precipitation-temperature changes and evolution of a small glacier in the southeastern European Alps during the last 90 years.* **International Journal of Climatology**, 35:10 2783-2797
<http://onlinelibrary.wiley.com/doi/10.1002/joc.4172/abstract>
- 6 **Colucci R.R.**, Forte E., Boccali C., Dossi M., Lanza L., Pipan M., Guglielmin M. (2015) *Evaluation of internal structure, volume and mass of glacial bodies by integrated LiDAR and ground penetrating radar (GPR) surveys: the case study of Canin Eastern Glacieret (Julian Alps, Italy).* **Surveys in Geophysics**, 36:2 231-525
<http://link.springer.com/article/10.1007/s10712-014-9311-1>
- 5 **Colucci R.R.**, Monegato G., Žebre M. (2014). *Glacial and proglacial deposits of the Resia Valley (NE Italy): new insights on the onset and decay of the last Alpine Glacial Maximum in the Julian Alps.* **Alpine and Mediterranean Quaternary**, 27(2) 85-104
http://amq.aiqua.it/images/joomd/AMQ_2722ColucciMonegatostand.pdf
- 4 Triglav Čekada M., Zorn M., **Colucci R.R.** (2014) *Area changes on Canin (Italy) and Triglav glaciers (Slovenia) from 1893 on based on archive imagery and Lidar.* **Geodetski vestnik**, 58:2 257-277
http://www.geodetski-vestnik.com/58/2/gv58-2_triglav.pdf
- 3 Forte E., Dossi M., Pipan M., **Colucci R.R.** (2014) *Velocity analysis from Common Offset GPR data inversion: theory and application on synthetic and real data.* **Geophysical Journal International** 197 (3): 1471-1483
<http://gji.oxfordjournals.org/content/197/3/1471>
- 2 Forte E., Dossi M., **Colucci R.R.**, Pipan M. (2013) *A new fast methodology to estimate the density of frozen materials by means of common offset GPR data.* **Journal of Applied Geophysics**, 99: 135-145
<http://www.sciencedirect.com/science/article/pii/S092698511300178X>
- 1 F. Raicich, V. Malačič, M. Celio, D. Giaiotti, C. Cantoni, **R.R. Colucci**, B. Čermelj, and A. Pucillo (2013) *Extreme air-sea interactions in the Gulf of Trieste (North Adriatic) during the strong Bora event in winter 2012,* **Journal of Geophysical Research**, Oceans, 118, 5238–5250
<http://onlinelibrary.wiley.com/doi/10.1002/jgrc.20398/abstract>

Book's chapters (7)

- 7 Colucci R.R. (2018) *I resti dei ghiacciai del Canin, Itinerario 21B. Itinerari glaciologici sulle montagne italiane. Guide Geologiche Regionali della SGI a cura di Società Geologica Italiana e Comitato Glaciologico Italiano. Pagg. 250-265 (in italian)*
- 6 Maggi V., **Colucci R.R.**, Scoto F., Giudice G., Randazzo L.G. (2018) *Ice caves in Italy. In Ice Caves 1st Edition. Perşoiu A. and Lauritzen S.E. (eds.) ISBN 9780128117392, Elsevier. 750 pages*
<https://www.elsevier.com/books/ice-caves/persoiu/978-0-12-811739-2>
- 5 M. Ravaioli, C. Bergami, F. Riminucci, S. Aracri, S. Aliani, M. Bastianini, A. Bergamasco, C. Bommarito, M. Borghini, R. Bozzano, C. Cantoni, E. Caterini, V. Cardin, C. Cesarini, **R.R. Colucci**, E. Crisafi, A. Crise, R. D'Adamo, C. Fanara, A. Giorgetti, F. Grilli, L. Langone, M. Lipizer, M. Marini, S. Menegon, T. Minuzzo, M. Miserocchi, E. Partescano, E. Paschini, F. Pavesi, P. Penna, S. Pensieri, A. Pugnetti, F. Raicich, A.G. di Sarra, A. Sarretta, K. Shroeder, G., Stanghellini, A. Vetrano (2017). *La rete scientifica italiana di siti fissi per l'osservazione del mare – IFON Stato dell'arte e upgrades durante il Progetto RITMARE (2012 – 2016). A cura di: Ravaioli M., Bergami C., Riminucci F. (2017). Roma, CNR Pubblicazioni 2017. pp. 50, ISBN 978-88-80802-44-0 (online).* http://www.ismar.cnr.it/eventi-e-notizie/file/divulgazione/libri/Ravaioli_et_al_IFON_CNR.pdf
- 4 Triglav Čekada M., Zorn M., **Colucci R.R.** (2016). *Monitoring Glacier Changes with the Use of Archive Images: The Example of the Julian Alps (NW Slovenia, NE Italy).* B. Koulov, G. Zhelezov (eds.), *Sustainable Mountain Regions:*

Challenges and Perspectives in Southeastern Europe, Springer International Publishing. 17: 233-242 doi 10.1007/978-3-319-27905-3_17

http://link.springer.com/chapter/10.1007/978-3-319-27905-3_17

- 3 **Colucci R.R (2015)** Cap.2 Come sta cambiando il clima in FVG. In "Impatti dei cambiamenti climatici sul territorio fisico regionale, Relazione di sintesi per la Regione F.V.G. (pagg.159). Pagg. 42-50
- 2 Bezzi A., **Colucci R.R.**, Fontolan G. (2015) Cap.1 Il cambiamento climatico globale. In "Impatti dei cambiamenti climatici sul territorio fisico regionale, Relazione di sintesi per la Regione F.V.G. (pagg.159). Pagg. 8-40
- 1 Stanghellini G., Bastianini M., Ravaoli M., **Colucci R.R.**, Paschini E., Carluccio S., Bortoluzzi G., Minuzzo T., Fonda C., Focaccia P. (2011). Observation Network and NRT Data Transmission: Case Studies and Integration. Dipartimento Terra e Ambiente - CNR ed. Enrico Brugnoli, Giuseppe Cavarretta, Salvatore Mazzola, Fabio Trincardi, Mariangela Ravaoli, Rosalia Santoleri (eds.). Roma: CNR, 2011. pp. 2223-2236

Abstract, extended abstracts, posters and proceedings (71)

- 71 Forte E., Santin I., **Colucci R.R.**, Dossi M., Guglielmin M., Pipan M., Roncoroni G., Žebre M. (2020) GPR data analysis for cold and warm ice detection and characterization in polythermal glaciers. 18th International Conference on Ground Penetrating Radar Golden, Colorado, 14–19 June 2020. doi:10.1190/gpr2020-019.1
- 70 Securo A., Martinucci D., Pillon S., **Colucci R.R.** (submitted) Ground based Structure from Motion (SfM) approach for reliable mass balance calculation of permanent ice deposits in caves. 9th International Workshop on Ice Caves (IWIC IX) Liptovský Mikuláš, Slovakia May 12-15, 2020
- 69 **Colucci R.R.**, Barcaza G., Diolaiuti G., Guglielmin M. (submitted) Internal structure of a rock glacier and a debris covered glacier in the Chilean Andes imaged by ERT surveys: comparative analyses and genetic implications. ICOP 2020 China
- 68 **Colucci R.R.**, Guglielmin M. (submitted) Global warming and rapid ice melt: suggestions from abrupt permafrost degradation and ice melting in an alpine ice cave deposit. ICOP 2020 China
- 67 De Blasi F., Gabrieli J., Lodi R., Dallo F., Spolaor A., Urbini S., **Colucci R.R.**, Cazorzi F., Carturan L., Pecci M., Barbante C. (2020) Ice memory: Italian surveys to preserve ice cores from Alps and Apennines ice bodies. 24th Alpine Glaciology Meeting, Milano (Italy) February 27-28, 2020 - Oral
- 66 Santin I., Forte E., Pavan M., Valt M., Žebre, M., **Colucci R.R.** (submitted) Evolution of the Marmolada glacier (2004-2014) by means of GPR surveys. 24th Alpine Glaciology Meeting, Milano (Italy) February 27-28, 2020 - Oral
- 65 Žebre, M., Giorgi, F., Glasser, N.F., Racoviteanu, A.E., Del Gobbo, C., **Colucci, R.R.** (submitted) Climate Change 1901-2100 and environmental ELA in the European Alps. 24th Alpine Glaciology Meeting, Milano (Italy) February 27-28, 2020 - Poster
- 64 Steven, R., Mechernich, S., Binnie, A., Žebre, M., **Colucci, R.R.** (2019). Glacial evolution using 36Cl moraine dating in the Krnica Valley, Julian Alps, Slovenia. GeoMünster "Past, Present, Future" 22–25 September 2019, Münster, Germany.
http://www.geomuenster2019.de/assets/programm_geomuenster2019_190919.pdf (Mon 42)
- 63 Raicich F., **Colucci R.R.** (2019) 117 years of near-surface sea temperature in the harbor of Trieste, Italy in the northern Adriatic Sea (1899-2015) EMS Annual Meeting Abstracts Vol. 16, EMS2019-681, 2019. European Conference for Applied Meteorology and Climatology, Lyngby Campus. Copenhagen (Denmark) 9-13 Sep. 2019.
<https://meetingorganizer.copernicus.org/EMS2019/EMS2019-681.pdf>
- 62 Del Gobbo C., Giorgi F., **Colucci R.R.** (2019) High resolution regional climate simulation at the alpine LGM. EMS Annual Meeting Abstracts Vol. 16, EMS2019-878, 2019. European Conference for Applied Meteorology and Climatology, Lyngby Campus. Copenhagen (Denmark) 9-13 Sep. 2019.
<https://meetingorganizer.copernicus.org/EMS2019/EMS2019-878.pdf>
- 61 Casetta L., **Colucci R.R.**, Ferneti M., Monegato G., (2019) The reconstruction of the LGM palaeoglacier of the Mount Raut (Carnic Forealps, NE Italy) Geophysical Research Abstracts Vol. 21, EGU2019-6844, 2019 EGU General Assembly 2019
<https://meetingorganizer.copernicus.org/EGU2019/EGU2019-6844.pdf>

- 60 De Blasi F., Gabrieli J., Shuravlev A., Urbini S., Burgay F., Lodi R., Dallo F., Spolaor A., **Colucci R.R.**, Barbante C. (accepted, 2019) Mt. Grand Combin ice core: correspondence among meteorological, morphological and geophysical evidence with ice core analysis. *Geophysical Research Abstracts* Vol. 21, EGU2019-14393, 2019 EGU General Assembly 2019
<https://meetingorganizer.copernicus.org/EGU2019/EGU2019-14393-2.pdf>
- 59 G. Monegato, P. Mozzi, A. Asioli, F. Badino, A. Bonfardeci, A. Caruso, **R.R. Colucci**, C. Del Gobbo, A. Fontana, F. Gianotti, M. Guglielmin, C. Pellegrini, R. Pini, C. Ravazzi, A. Ribolini, L. Ronchi, S. Rossato, M. Spagnolo, F. Trincardi, M. Žebre & A. Zerboni (2019) The Last Glacial Maximum in the southern side of the European Alps Workshop: The Last Glacial Maximum in Europe, State of knowledge in Geoscience and Archaeology. 20th to 22nd March 2019, Friedrich-Alexander-Universität Erlangen-Nürnberg (Germany)
- 58 Dossi M., Forte E., Pipan M., **Colucci R.R.** (2018) Quantitative 3-D GPR analysis to estimate the total volume and water content of a glacier. 17th International Conference on Ground Penetrating Radar - ICGPR 2018 (Rapperswill, Switzerland, 18-21 June, 2018)
<https://ieeexplore.ieee.org/abstract/document/8441636/>
- 57 **Colucci R.R.**, Žebre M., Maset E., Torma C. (2018) A decadal positive mass balance of very small glaciers in the southeastern European Alps controlled by extreme seasonal precipitation events. British Society of Geomorphology annual meeting 2018, Aberystwyth University, Wales UK. 10-12 September 2018 (Poster)
- 56 Ricchi A., Bonaldo D., Miglietta M.M., **Colucci R.R.**, Korosec M., Carniel S. (2018) Dynamics and wind-wave interaction of a Bora wind jet: a very high resolution simulation using WRF model. EMS Annual Meeting Abstracts Vol. 15, EMS2018, 2018. European Conference for Applied Meteorology and Climatology, Budapest, Hungary 3-7 Sep. 2018.
- 55 Bonaldo D., Ricchi A., **Colucci R.R.**, Korosec M., Miglietta M.M., Carniel S. (2018) Disentangling atmosphere-ocean feedbacks during a strong wind jet event. EMS Annual Meeting Abstracts Vol. 15, EMS2018, 2018. European Conference for Applied Meteorology and Climatology, Budapest, Hungary 3-7 Sep. 2018.
- 54 **Colucci R.R.**, Maset E., Torma C. (2018) Resilience of small glaciers to global warming due to increased winter precipitation in the southeastern Alps. EMS Annual Meeting Abstracts Vol. 15, EMS2018-408, 2018. European Conference for Applied Meteorology and Climatology, Budapest, Hungary 3-7 Sep. 2018 (oral communication).
- 53 Securo A., Martinucci D., Pillon S., **Colucci R.R.** (2018) Meteorological control on summer mass balance evolution in a stato-dynamic ice cave by means of ground based SfM. EMS Annual Meeting Abstracts Vol. 15, EMS2018-560, 2018. European Conference for Applied Meteorology and Climatology, Budapest, Hungary 3-7 Sep. 2018 (poster)
- 52 Peron A., Barbante C., Bonafè G., Gabrieli J., Montanari F., Pizzul E., Vecchiato M., **Colucci R.R.** (2018). Meteorological and topographical control in polycyclic aromatic hydrocarbons and heavy metals deposition over alpine glaciers. EMS Annual Meeting Abstracts Vol. 15, EMS2018-3, 2018. European Conference for Applied Meteorology and Climatology, Budapest, Hungary 3-7 Sep. 2018 (oral communication)
- 51 Securo A., Martinucci D., Pillon S., **Colucci R.R.** (2018) Ice caves balance monitoring by using ground based SfM. 8th International Workshop on Ice Caves (IWIC VIII). Potes (Spain) 11-16 June 2018 (poster)
- 50 Bertozzi B., Di Sabatino S., Pulvirenti B., **Colucci R.R.** (2018) Understanding heat exchange phenomenon within ice caves through CFD approaches: a case study from the southeastern Alps. 8th International Workshop on Ice Caves (IWIC VIII). Potes (Spain) 11-16 June 2018 (Oral Communication)
- 49 **Colucci R.R.**, Luetscher M., Festi D., Moseley G.E., Schwikowski M., Eichler A., Edwards R.L. (2018) On issues related to dating techniques in ice caves. 8th International Workshop on Ice Caves (IWIC VIII). Potes (Spain) 11-16 June 2018 (Oral Communication)
- 48 **Colucci R.R.**, Guglielmin M. (2018) Intercepting permafrost degradation in an alpine ice cave. 8th International Workshop on Ice Caves (IWIC VIII). Potes (Spain) 11-16 June 2018 (Oral Communication)
- 47 Petrini M., Colleoni F., Kirchner N., Hughes L.C.A., Camerlenghi A., Rebesco M., Lucchi R.G., Forte E., **Colucci R.R.**, Noormets R. (2018) Ice stream sensitivity to ocean basal melting in the simulated retreat of the Barents Sea Ice Sheet during the last deglaciation. 6th International Conference on Palaeo-Arctic Spatial and Temporal (PAST) Gateways: 16-20 April, 2018 - Durham (UK) (oral communication).

- 46 M. Oliva, M. Žebre, M. Guglielmin, A. Çiner, G. Vieira, X. Bodin, N. Andrés, **R.R. Colucci**, C. García-Hernández, P. Hughes, C. Mora, J. Nofre, D. Palacios, A. Pérez-Alberti, A. Ribolini, J. Ruiz-Fernández, M.A. Sarikaya, E. Serrano, P. Urdea, M. Valcárcel, J. Woodward, C. Yıldırım (2018) The existence of permafrost conditions in the Mediterranean basin since the Last Glaciation *La existencia de permafrost en la cuenca mediterránea desde la Última Glaciación* XV Congreso de la Sociedad Española de Geomorfología Mallorca (Balearès) 11-14 Sep 2018
- 45 **Colucci R.R.** (2018) Glaciers and ice caves as interconnected features in the geomorphological evolution of the landscape of high karstic environments. Geophysical Research Abstracts Vol. 20, EGU2018-14865-2, 2018. EGU General Assembly 2018 (Oral communication)
- 44 Monegato G., **Colucci R.R.**, Poli M.E., Žebre M. (2018). Traces of a Maximum Ice Extent in the south-eastern European Alps. Geophysical Research Abstracts Vol. 20, EGU2018-15718, 2018. EGU General Assembly 2018 (Poster)
- 43 Peron A., Barbante C., Bonafè G., Gabrieli J., Montanari F., Pizzul E., Vecchiato M., **Colucci R.R.** (2018). First considerations and meteorological control in polycyclic aromatic hydrocarbons (PAH) and heavy metals deposition over alpine glaciers. Geophysical Research Abstracts Vol. 20, EGU2018-995, 2018 EGU General Assembly 2018 (Oral communication)
- 42 M. Oliva, M. Žebre, M. Guglielmin, A. Çiner, G. Vieira, X. Bodin, N. Andrés, **R.R. Colucci**, C. García-Hernández, P. Hughes, C. Mora, J. Nofre, D. Palacios, A. Pérez-Alberti, A. Ribolini, J. Ruiz-Fernández, M.A. Sarikaya, E. Serrano, P. Urdea, M. Valcárcel, J. Woodward, C. Yıldırım, (2018, Submitted) Permafrost conditions in the Mediterranean region since the Last Glaciation 5th European Conference on Permafrost Chamonix, 23 Jun – 1 Jul 2018 (oral communication)
- 41 Ravaioli M., Bergami C., Riminucci F., Aracri S., Aliani S., Bastianini M., Bergamasco A., Bommarito C., Borghini M., Bozzano F., Brunetti F., Cantoni C., Caterini E., Cardin V., Cesraini, **Colucci R.R.**, Crisafi E., Crise A., D'Adamo R., Di Sarra A.G., Fanara C., Giorgetti A., Grilli F., Langone L., Lipizer M., Marini M., Menegon S., Minuzzo T., Miserocchi S., Partescano E., Paschini E., Pavesi F., Penna P., pensieri S., Pugnetti A., Raicich F., Sarretta A., Schroeder K., Scirocco T., Specchiulli A., Stanghellini G., vetrano A. (2017) The Italian Fixed-point Observatory Network for marine environmental monitoring – IFON. State of the art and upgrades during the italian flagship project RITMARE (2012-2016). IMEKO, International Conference on Metrology for the Sea. Naples, Italy, October 11-13, 2017
- 40 Petrini M., Colleoni F., Kirchner N., Camerlenghi A.; **Colucci R.R.**; Forte E.; Lucchi R.G., Noormets R., Rebesco M. (2017) Grounding Line migration and ocean basal melting: competing effects in the simulated retreat of the Storfjorden (Svalbard) ice stream during the last deglaciation. Past Antarctic Ice Sheet Dynamics (PAIS) Conference 2017, September 10-15th 2017 Trieste, Italy. (Oral presentation)
- 39 Peron A., Barbante C., Gabrieli J., Vecchiato M., **Colucci R.R.** (2017) First considerations and meteorological control in polycyclic aromatic hydrocarbons (PAH) and heavy metals deposition over alpine glaciers. EMS Annual Meeting Abstracts Vol. 14, EMS2017-172, 2017 (EMS&ECAC 2017). European Conference for Applied Meteorology and Climatology, Dublin, Ireland 4-8 Sep. 2017 (poster presentation)
- 38 Bertozzi B., Di Sabatino S., Pulvirenti B., **Colucci R.R.** (2017) Understanding ice cave microclimate through thermo-fluid dynamics approaches: a case study from the southeastern Alps. EMS Annual Meeting Abstracts Vol. 14, EMS2017-111, 2017 (EMS&ECAC 2016). European Conference for Applied Meteorology and Climatology, Dublin, Ireland 4-8 Sep. 2017 (oral presentation)
- 37 Petrini M., Kirchner N., Colleoni F., Camerlenghi A., Rebesco M., Lucchi R.G., Forte E., **Colucci R.R.** (2017) Reconstructing the post-LGM decay of the Eurasian Ice Sheets with Ice Sheet Models; data-model comparison and focus on the Storfjorden (Svalbard) ice stream dynamics history. Abstracts Vol. 19, EGU2017-17181, 2017. EGU General Assembly 2017 (oral presentation). <http://meetingorganizer.copernicus.org/EGU2017/EGU2017-4464.pdf>
- 36 **Colucci R.R.**, Barbante C., Bertò ., Dreossi G., Festi D., Forte E., Gabrieli J., Guglielmin M., Lenaz D., Luetscher M., Maggi V., Princivalle F., Schwikowski M., Stenni B., Žebre M. (2017) Ice cores and calcite precipitates from alpine ice caves as useful proxies in paleoclimate reconstructions. Geophysical Research Abstracts Vol. 19, EGU2017-4464, 2017. EGU General Assembly 2017 (poster). <http://meetingorganizer.copernicus.org/EGU2017/EGU2017-17181-3.pdf>

- 35 Petrini M., Kirchner N., Colleoni F., Camerlenghi A., Rebesco M., Lucchi R., Noormets R., Forte E., **Colucci R.R.** (2016) Modeling the post-LGM deglaciation of the Scandinavian-Barents Sea Ice Sheet; a model intercomparison approach. ARCA project Arctic present climatic change. Final Conference, Rome October 11, 2016 (oral presentation)
- 34 Petrini M., Kirchner N., Colleoni F., Camerlenghi A., Rebesco M., Lucchi R., Noormets R., Forte E., **Colucci R.R.** (2016) Modeling the post-LGM deglaciation of the Scandinavian-Barents Sea Ice Sheet; a model intercomparison approach. EMS Annual Meeting Abstracts Vol. 13, EMS2016-547, 2016 (EMS&ECAC 2016). European Conference on Applied Climatology, Trieste, Italy 12-16 Sep. 2016 (oral presentation)
<http://meetingorganizer.copernicus.org/EMS2016/EMS2016-547-1.pdf>
- 33 **Colucci R.R.**, Giorgi F., Torma C. (2016).December 2015: Unprecedented climatic conditions in the Eastern Alps. EMS Annual Meeting Abstracts Vol. 13, EMS2016-XXX, 2016 (EMS&ECAC 2016). European Conference on Applied Climatology, Trieste, Italy 12-16 Sep. 2016 (oral presentation)
- 32 **Colucci R.R.**, Bertozzi B., Fontana D., Forte E., Potleca M., Guglielmin M.(2016).Abrupt decay of underground cryosphere driven by increasing extreme weather events in the Southeastern European Alps. EMS Annual Meeting Abstracts Vol. 13, EMS2016-313, 2016 (EMS&ECAC 2016). European Conference on Applied Climatology.Trieste, Italy 12-16 Sep. 2016 (poster+oral presentation)
- 31 **Colucci R.R.**, Fontana D., Forte E., Potleca M., Guglielmin M.(2016).The new inventory of ice caves in Friuli Venezia Giulia (Italy) add to over 2500 ice caves in the southeastern Alps, Europe.7th International Workshop on Ice Caves (IWIC VII). Postojna 16-22 May 2016 (Poster)
- 30 **Colucci R.R.**, Forte E., Maggi V., Stenni B., Barbante C., Bertò M., Dreossi G., Filipazzi M, Gabrieli J., Hoffmann H, Lenaz D (2016).The Vasto ice cave in the south-eastern Alps, Europe: preliminary results from an ice core analysis . 7th International Workshop on Ice Caves (IWIC VII). Postojna 16-22 May 2016 (Poster)
- 29 **Colucci R.R.**, Fontana D., Forte E., Potleca M., Guglielmin M.(2016).Ice cave mass balance response to increasing extreme weather events. 7th International Workshop on Ice Caves (IWIC VII). Postojna 16-22 May 2016 (Oral Presentation)
- 28 Dossi M., Forte E., **Colucci R.R.**, Pipan M., Bortoletto A.(Peer reviewed Ext.Abstr.).Automated reflection picking and inversion: applications to ground and airborne GPR surveys. 16th International Conference on Ground Penetrating Radar - ICGPR 2016 (Honk Kong 12-16 June, 2016)
- 27 **Colucci R.R.**, Boccali C., Žebre M., Guglielmin M. (2016). Rock glaciers and protalus ramparts in the south-eastern Alps. Geophysical Research Abstracts Vol. 18, EGU2016-6160, 2016. EGU General Assembly 2016.
<http://meetingorganizer.copernicus.org/EGU2016/EGU2016-6160.pdf>
- 26 Buricelli S., **Colucci R.R.**, Galluccio P, Milocco R., Molinari L., Noacco C., Nordio S., Pistrin G., Pieri F., Stampetta R., Villani A., Stel F. (2015). Urban Heat Island or Urban Heat Bubble? EMS Annual Meeting Abstracts Vol. 12, [EMS2015-251-2](http://meetingorganizer.copernicus.org/EMS2015/EMS2015-251-2), 2015 15th EMS / 12th ECAM (Sofia, Bulgaria, 7-11 September, 2015).
- 25 Piermattei L., Carturan L., Cazorzi F., **Colucci R.R.**, Dalla Fontana G., Forte E. (2015). Monitoring of a debris-covered and avalanche-fed glacier in the Eastern Italian Alps using ground-based SfM-MVS. Geophysical Research Abstracts, Vol. 17, EGU2015-5236, 2015. EGU General Assembly 2015. (Wien, Austria, 12-17 April 2015).
- 24 Žebre M., Stepišnik U., **Colucci R.R.**, Forte E., Monegato G. (2015) Glacial and hydrokarstic interactions in the evolution of the Gomancepiéd mont polje (Dinaric karst), as revealed by ground penetrating radar (GPR) surveys. Geophysical Research Abstracts, Vol. 17, EGU2015-861, 2015. EGU General Assembly 2015. (Wien, Austria, 12-17 April 2015).
- 23 **Colucci R.R.**, Micheletti S., Medeossi R., Moro D., Salvador M., Stefanuto L. (2014) *The exceptional snow accumulation of winter 2013-14 and the possible response of small glacial bodies: the case study of the Julian Alps (southeastern alpine chain)* EMS Annual Meeting Abstracts Vol. 11, EMS2014-478, 201414th EMS / 10th ECAC
<http://meetingorganizer.copernicus.org/EMS2014/EMS2014-478.pdf>
- 22 **Colucci R.R.**, Forte E., Triglav C.M., Basso Bondini M., Colle Fontana M., Del Gobbo C., Fontana D., Pierobon S., Zorn M. (2014) *Present state of the cryosphere in the italian and slovenian southeastern Alps*. International Symposium CGI. The Future of the Glaciers, from the past to the next 100 years Turin, Italy. 18th-21st September 2014 (Abstract proceedings and oral presentation)

- 21 **Colucci R.R.**, Diolaiuti G., Smiraglia C., Barcaza G. , Guglielmin M. **(2014)** *Electrical tomography surveys to study the internal structure of a rock glacier and a debris covered glacier in the Chilean Andes: comparative analyses and genetic implications*. International Symposium CGI. The Future of the Glaciers, from the past to the next 100 years Turin, Italy. 18th-21st September 2014 (Abstract proceedings and Poster)
- 20 Fontana D., Forte E., **Colucci R.R.** **(2014)** *Characterization of two permanent ice cave deposits in the southeastern Italian Alps by means of ground penetrating radar (GPR)*. International Symposium CGI. The Future of the Glaciers, from the past to the next 100 years Turin, Italy. 18th-21st September 2014 (Abstract proceedings and Poster)
- 19 Colle Fontana M., Pierobon S., Basso Bondini M., Del Gobbo C., Forte E., **Colucci R.R.** **(2014)** *Positive mass balance of the very small glaciers of Prevala and Eastern Canin (southeastern Italian Alps) in the hydrological year 2012-2013*. International Symposium CGI. The Future of the Glaciers, from the past to the next 100 years Turin, Italy. 18th-21st September 2014 (Abstract proceedings and Poster)
- 18 **Colucci R.R.**, Fontana D., Forte E. **(2014)** *Characterization of two permanent ice cave deposits in the southeastern Alps (Italy) by means of Ground Penetrating Radar (GPR)*. VI International Workshop on Ice Caves. Idaho Falls, USA. Paper proceedings (peer reviewed), 8pp.
- 17 Forte E., **Colucci R.R.**, Basso Bondini M., Belligoi D., Colle Fontana M., Del Gobbo C., Filippazzi M., Fontana D., Maggi V., Stenni B. **(2014)** *The MONICA (MONitoring of Ice within Caves) project: A multidisciplinary approach for the geophysical and paleoclimatic characterization of permanent ice deposits in the Southeastern Alps (Italy)*. VI International Workshop on Ice Caves. Idaho Falls, USA. Extended Abstract proceedings (peer reviewed)
- 16 **Colucci R.R.** **(2014)** *Current evidence of glaciation in the Julian Alps*. Proceedings of the II PAST Gateways International Conference and Workshop, Trieste 19-23 May, 2014. 15-17, ISBN 978-88-902101-4-3
- 15 Forte E., Dossi M., Colle Fontana M., **Colucci R.R.** **(2014)** *4-D quantitative GPR analyses to study the summer mass balance of a glacier: a case history*. Proceedings of the 15th International Conference on Ground Penetrating Radar, GPR 2014, 6970444, pp. 352-356
- 14 Dossi M., Forte E., Pipan M., **Colucci R.R.** **(2013)** *A new methodology to estimate the EM velocity from Common Offset GPR: Theory and application on synthetic and real data*. Extended abstract of the 32nd GNGTS congress, Trieste November 19-21, 2013, 112-118, ISBN 978-88-902101-8-1 (proceedings)
- 13 Forte E., Pipan M., **Colucci R.R.** **(2012)** *GPR velocity and amplitude analyses to characterize stratigraphy and estimate the ice density: Eastern Glacier of Mt. Canin, Italy*. Proceedings of the 14th International Conference on Ground Penetrating Radar, June, 4-8. 2012, Shanghai, China, 652-658, ISBN 978-1-4673-2660-5. (proceedings) (peer reviewed)
- 12 **Colucci R.R.**, Forte E., Guglielmin M. **(2012)** *Underground cryosphere in the Monte Canin Massif, Alpi Giulie (Italy)*. 5th International Workshop on Ice Caves (IWIC-V). Barzio (LC) September 16-23, 2012 (proceedings, and oral presentation)
- 11 **Colucci R.R.**, Bearzot F., Finocchiaro F., Forte E., Guglielmin M., Potleca M. **(2012)** *First surveys in an ice cave of Monte Canin massif, Alpi Giulie (Italy)*. 5th International Workshop on Ice Caves (IWIC-V). Barzio (LC) September 16-23, 2012 (proceedings and poster)
- 10 **Colucci R.R.**, Finocchiaro F., Forte E., Potleca M., Guglielmin M. **(2012)** *Rock, ice and air temperature monitoring in a mountain karstic cave interested by permanent ice deposits (Prealpi Giulie - Friuli Venezia Giulia)*. IV Convegno Nazionale AIGEO, Palermo 2-5 ottobre 2012. (Poster)
- 9 **Colucci R.R.** **(2012)**. *New weather station on Monte Canin*. Progressione n. 58, Settembre 2012 anno XXXII, n.1-2 (gen-dic 2011) pag. 162.
- 8 **Colucci R.R.** **(2011)** *The cryosphere of Friuli Venezia Giulia: modern and relict evidence*. Proceedings of the 4th national meeting of young geomorphologists. 28-30 September, 2011- ISBN 978-88-9047083-7. pagg.58-60
- 7 **Colucci R.R.**, Finocchiaro F., Forte e., Guglielmin M., Moro D. **(2011)** – *The Cryosphere in the Julian Alps (FVG-Italy), the case study of Monte Canin Massif*. Geoitalia 2011, VIII forum italiano di Scienze della Terra. Poster
- 6 **Colucci R.R.**, Pucillo A. **(2010)** *On the analysis of an extreme Bora wind event over the northern Adriatic Sea*. 10th EMS Annual Meeting and 8th European Conference on Applied Climatology, Zürich, Switzerland
- 5 **Colucci R.R.** & Lombardi R. **(2010)** *The ancient story of Bora*. 10th EMS Annual Meeting, 10th European Conference on Applications of Meteorology (ECAM) Abstracts, held Sept. 13-17, 2010 in Zürich, Switzerland. <http://meetings.copernicus.org/ems2010/>, id. EMS2010-732

- 4 **Colucci R.R.**, Cucchi F., Stravisi F. and Zini L. (2009) *Analysis of strong rainfall events at Cividale del Friuli (Northeastern Italy) from 1920 to 2007*. Geophysical Research Abstracts, Vol. 11, EGU2009-10400, 2009 – European Geoscience Union General Assembly 2009, (Wien, Austria, 19-24 April 2009).
- 3 Cantoni C., **Colucci R.R.**, Cozzi S., Luchetta A., Catalano G., Crisciani F. (2009) *Oceanographic properties and carbonate system in the Gulf of Trieste (VECTOR WP 6.2), first results*. (Poster and proceedings)
- 2 **Colucci R.R.**, Micheletti S. & Fabbo R. (2009) *The Climatic Observatory of the Karst (OCC), a scientific facility within an important tourist framework*. 9th EMS Annual Meeting, 9th European Conference on Applications of Meteorology (ECAM) Abstracts, held Sept. 28-Oct. 2, 2009 in Toulouse, France. <http://meetings.copernicus.org/ems2009/>, id. EMS2009-507. (Abstract)
- 1 F. Raicich, **R.R. Colucci** & F. Crisciani (2008) *Severe wind and precipitation events in the Bay of Trieste from coastal and offshore observations*. II Workshop HyMeX. (Palaiseau, France, 2-4 June 2008). Poster

Scientific Reports (5)

- 5 Vilibić I., Bastianini M., Bonaldo D., Colucci R., Pomaro A., Raicich F., Vitelletti M.L. (2020) Assessing different aspects of present state and ongoing climate changes at both Adriatic and local scale. Interreg Italy-Croatia Change We Care Activity 3.1 Deliverable 3.1.1 <https://www.italy-croatia.eu/web/changewecare>
- 4 V. Maggi, M. Moretti, M. de Amicis, G. Leonelli, F. Valle, L. Castellano, A. Provenzale, C. Ravazzi, R. Pini, M. Potenza, F. Cavaliere, **R. Colucci**, C. Mayer, E. Vuillermoz (2015) Project of Strategic Interest NEXTDATA. Deliverables D1.4.4, D1.4.5, D1.4.6, D1.4.7, D1.4.10 a, b, c
<http://www.nextdataproject.eu/sites/default/files/docs/D1.4.4-10.pdf>
- 3 V. Maggi, M. Moretti, M. de Amicis, G. Leonelli, F. Valle, L. Castellano, A. Provenzale, C. Ravazzi, R. Pini, M. Potenza, F. Cavaliere, **R. Colucci**, C. Mayer, E. Vuillermoz (2015) Project of Strategic Interest NEXTDATA. Scientific Report for the reference period 01/01/2014 – 31/12/2014 WP 1.4 Environment and climate data from non-polar ice cores.
http://www.nextdataproject.eu/sites/default/files/docs/WP1.4_ENG_2014.pdf
- 2 V. Maggi, M. Moretti, M. de Amicis, C. Ravazzi, R. Pini, L. Castellano, M. Potenza, F. Cavaliere, **R. Colucci**, C. Mayer, A. Lambrecht, D. Bernasconi, L. Bonetti, C. Smiraglia, G. Diolaiuti (2014) Project of Strategic Interest NEXTDATA. Scientific Report for the reference period 01/01/2013 – 31/12/2013 WP 1.4 Environment and climate data from non-polar ice cores.
http://www.nextdataproject.it/sites/default/files/docs/WP1.4_ENG_2013_revised.pdf
- 1 **Colucci R.R.**, Belò M., Guglielmin M., Tamburini A., (2012) *Estudio de un glaciar rocoso como contribución al conocimiento del permafrost chileno: mediciones en terreno realizadas en el glaciar rocoso P (enero y marzo 2012)*. Programa Plan de Acción para la Conservación de Glaciares ante Cambio Climático, DGA-BID. Gobierno de Chile, Ministerio de Obras Públicas-Dirección General de Aguas. Santiago, Mayo 2012. Pagg. 60-70. (Final report in spanish)

Memberships and services to the Scientific Community

- **Guest Editor** (December 2019): Atmosphere-MDPI EISSN 2073-4433. Special Issue *Interactions between the Cryosphere and Climate (Change)*
https://www.mdpi.com/journal/atmosphere/special_issues/Cryosphere_Climate
- **Topycal Editor**: Advances in Science and Research (ASR) – Special issue “EMS2019”
<http://www.advances-in-science-and-research.net//index.html>
- **IPA (International Permafrost Association) Italian Contact Point** (Since September 2019)
<https://ipa.arcticportal.org/about-the-ipa/country-members>
- **Scientific Editor** (Since April 2019): Journal of Mountain Science, Springer ISSN: 1672-6316
<http://jms.imde.ac.cn/web/21915/COLUCCI%20RENATO%20R>.

- **Convener:** EMS 2019 (UP2.4) The cryosphere and cold region processes in the global climate system
<https://meetingorganizer.copernicus.org/EMS2019/session/33619>
- **Topycal Editor:** Advances in Science and Research (ASR) – Special issue “EMS2018”
<http://www.advances-in-science-and-research.net//index.html>
- **Convener:** EMS 2018 (UP2.4) The Cryosphere and its interactions with meteorology and the climate system
<https://meetingorganizer.copernicus.org/EMS2018/session/29304>
- **Convener:** EMS 2017 (UP2.4) The Cryosphere and its interactions with meteorology and the climate system
<http://meetingorganizer.copernicus.org/EMS2017/session/25551>
- **Convener:** EMS-ECAC 2016 (UC4) The Cryosphere and its interactions with the climate system
<http://meetingorganizer.copernicus.org/EMS2016/session/22051>
- **Topycal Editor:** Advances in Science and Research (ASR) – Special issue “EMS2016”
<http://www.advances-in-science-and-research.net//index.html>
- **Organizing committee:** SCAR/PAIS Past Antarctic Ice Sheet Dynamics conference | 10-15 September 2017 | Trieste, Italy
<http://pais-conference-2017.inogs.it/node/4>
- **Council member:** European Meteorological Society (Sep 2014 - Sep 2017)
<http://www.emetsoc.org/about-ems/council/council-composition/>
- **Scientific committee and local organizing committee:** 16th EMS Annual Meeting & 11th European Conference on Applied Climatology (ECAC) | 12–16 September 2016 | Trieste, Italy
<http://www.ems2016.eu/information/committees.html>
- **Program committee:** 7th International Workshop on Ice Caves | 16-22 May 2016 | Postojna, Slovenia
http://iwic.zrc-sazu.si/files/First_circular_7_IWIC_2016.pdf
- **Council member:** Meteorological Society of Friuli Venezia Giulia-Italy (UMFVG), member of the European Meteorological Society (EMS) (May 2001-now)
- **Italian representative** of Permafrost Young Researcher network (PYRN)
<http://pyrn.arcticportal.org/national-representatives>
- **Journal reviewer:** International Journal of Climatology, Climate Dynamics, The Cryosphere, GIScience Remote Sensing, Water, Int. Journal of Caves and Karst studies, Cold Region Science and Technology, Moravian Geographical Reports, Geografia Fisica & Dinamica Quaternaria, Climate Research, Permafrost and Periglacial Processes, npj-Climate and Atmospheric Sciences, Journal of Mountain Science, Journal of Hydrology, Journal of Glaciology,
- **Member:** Association of Polar Early Career Scientists (APECS); European Meteorological Society (EMS); Italian Glaciological Committee (CGI); Italian Association of Physical Geography and Geomorphology (AIGEO); International Permafrost Association (IPA); Italian Society for Climate Science (SISC); Permafrost Young Researcher network (PYRN); International Association of Cryospheric Sciences (IACS); International Glaciological Society (IGS); Italian Association for Quaternary Research (AIQUA); Italian Association for Atmospheric Sciences and Meteorology (AISMA); Italian Meteorological Society (SMI)
- **Vice-President:** Meteorological Society of Friuli Venezia Giulia-Italy (UMFVG), member of the European Meteorological Society (EMS) (President in the period April 2010-December 2016).
- **Chief editor:** Meteorologica, biannual bulletin UMFVG – ISSN 1827-3858

Lectures, invited talks, workshops, etc. (9)

- 9 **Colucci R.R. (2019)** *The hidden part of the cryosphere* Ruhr University Bochum (RUB), Research Colloquium, June 26th, 2019 Department of Geography of the RUB – Invited seminar
https://www.geographie.ruhr-uni-bochum.de/fileadmin/redakteur/Kolloquium/Koloquium_SS19.pdf

- 8 **Colucci R.R.**, Guglielmin M. (2017) *Rock glacier evolution in the Alps since the LGM*. Invited talk by AIQUA workshop, Updates on the chronology, stratigraphy and environments of the Last Glacial Maximum and the Late Glacial on the southern side of the Alps, June 22-23, 2017
- 7 **Colucci R.R.** (2017) *Ice caves in the Alps*. 29th March, 2017. Invited talk by Prof. Uroš Stepisnik, Department of Geography, Ljubljana University (Slovenia)
- 6 **Colucci R.R.** (2017) *Recent findings of coarse Cryogenic Cave Carbonates (CCC) as a potential tool for inferring permafrost thawing events in the southern Alps*. 31st January, 2017. Invited talk by Prof. Andreas Pflitsch, Bochum University (Germany)
- 5 **Colucci R.R.** (2016) *Evolution of the cryosphere in the southeastern Alps under a changing climate* 25 May 2016, invited talk by Prof. Carlo Barbante, Cà Foscari University – Venice (Italy)
- 4 **Colucci R.R. & Žebre M.** (2014) *Glacier and permafrost in the Mediterranean: The case study of the South-eastern Alps and coastal Dinaric Mountains*. Invited talk at the 2nd PAST-Gateways conference and international workshop; Trieste 19-23 May 2013.
- 3 **Colucci R.R.** (2013) *Mountain permafrost in Friuli Venezia Giulia; past and present evidence*. Geomorphological Association of Slovenia; Ljubljana, 10th December 2013. Invited lecture (<http://www.geomorfolosko-drustvo.si/2013/12/03/predavanje-mountain-permafrost-in-friuli-venezia-giulia-past-and-present-evidence/>)
- 2 Godone, D., G.B Sepulveda, M. Belò, D. Bocchiola, M. Citterio, **R.R. Colucci**, C. D'Agata, G.A. Diolaiuti, A. Forieri, M. Guglielmin, G. Leonelli, L. Listo, S. Lorenzini, S. Mambretti, C. Mihalcea, U. F. Minora, S. Parouty, M. C. Rulli, A. Senese, C. Smiraglia & A. Tamburini. (2013) *Recent changes of some selected Chilean glaciers as a contribution to understand climate change impacts on the Cryosphere*. High Summit 2013. International Conference on Mountain and Climate Change, Lecco, Italy, October 23-25, 2013.
- 1 **Colucci R.R.** (2013) *Rock Glacier inventory and permafrost evidence in the Italian southeastern Alps*. Invited talk at the Alpine Quaternary Workshop (INTIMATE & INQUA-CECLAP) Obergurgl, Austria, 3-7 October 2013.

Scientific field guides (2)

- **Colucci R.R.** (2016) Field Excursion at the Marmolada glacier during the Past Antarctic Ice Sheet Dynamics (PAIS) Conference 2017, September 10-15th 2017 - Trieste - Italy
http://pais-conference-2017.inogs.it/sites/default/files/Field_trip%20info_0.pdf
- **Colucci R.R. & Monegato G.** (2014) Field Excursion on the South-Eastern Italian Alps and Prealps: Alpine Würm (LGM) moraines and evidences of the Little Ice Age in the area of the Monte Canin. 2nd PAST-Gateways Conference and International Workshop; Trieste 19-23 May 2013.

Tutoring of thesis (23)

Defended:

Doctorate

Co-mentor (2017)- *Reconstructing with numerical Ice Sheet Models the post-LGM decay of the Eurasian Ice Sheets: data-model comparison and focus on the Storfjorden (Svalbard) ice stream dynamics history (PhD, 2017)*. PhD candidate Ma. Sc. Michele Petrini (succesfully defended in 2017).

Ma.Sc.

Co-mentor (2019)– *Variazioni recenti di temperatura e precipitazione nella regione alpina* (Settembre 2019) Università di Trieste, Corso di Laurea Magistrale in Ecologia dei Cambiamenti Globali (**Ma.Sc.**). Laureando Nicola Stefanuto. Relatore Prof. Filippo Giorgi; Correlatore Dott. **Renato R. Colucci**.

Co-mentor (2018)– *Analisi e confronto di dati Ground Penetrating Radar (2004 e 2015) da terra e da elicottero per la stima delle variazioni di volume del ghiacciaio della Marmolada (Alpi orientali)* Università di Trieste, Corso di Laurea Magistrale in Geoscienze (**Ma.Sc.**). Laureanda Ilaria Santin. Relatore Dr. Emanuele Forte; Correlatore Dott. **Renato R. Colucci**.

Co-mentor (2016)- *Feasibility study for understanding ice cave microclimate through thermo-fluid dynamics approaches* (Aprile 2016) Alma Mater Studiorum · Università di Bologna Scuola di Scienze, Laurea Magistrale in Fisica del Sistema Terra. Laureanda Barbara Bertozzi. Relatore Prof. Silvana Di Sabatino; correlatori dott. **Renato R. Colucci** and Prof. Beatrice Pulvirenti.

Co-mentor (2014)- *Imaging and characterization of permanent ice cave deposits in high elevated karstic caves of Julian Alps by using GPR* (Aprile 2014). Università di Trieste, Corso di Laurea Magistrale in Geoscienze (**Ma.Sc.**). Laureando Daniele Fontana. Relatore Dott. Emanuele Forte; Correlatore Dott. **Renato R. Colucci**.

Co-mentor (2014)- *Mass Balances of Prevala glacieret: comparison between direct and GPR surveys and ablation rates estimation* (Aprile 2014). Università di Udine e Trieste, Corso di Laurea Magistrale in Scienze e Tecnologie per l’Ambiente ed il territorio (Master degree). Laureando Mauro Colle Fontana. Relatore Dott. Emanuele Forte; correlatore Dott. Renato R. Colucci

Co-mentor (2011)- *Caratteristiche climatiche del Carso triestino*. Università degli studi di Trieste, Corso di Laurea in Scienze Geologiche. Studente Luciano Zanier. Relatore Prof. Franco Stravisi, correlatore dott. Renato R. Colucci.

B.Sc.

Mentor (2020)– *Uso di software graph & image analysis per la creazione di database climatici e meteorologici da acquisizione analogiche e confronto con database digitali*. Università di Trieste, Corso di Laurea triennale in Geologia (**B.Sc.**) Laureanda Federica Fenu. Relatore **Dr. Renato R. Colucci**, correlatore Dr. Fabio Raicich

Mentor (2020)– *Spessore e caratteristiche del deposito di ghiaccio permanente nella cavità n.297 presso il Foran del Muss (Canin) attraverso l’uso del Ground Penetrating Radar* Università di Trieste, Corso di Laurea triennale in Geologia (**B.Sc.**) Laureanda Carlotta Zanettini. Relatore **Dr. Renato R. Colucci**, correlatore Dr. Emanuele Forte

Mentor (2019)– *Metodi di preparazione di campioni di ghiaccio ipogeo per analisi mediante Atom Trap Trace Analysis (ATTA) per datazioni con ³⁹Ar* (**B.Sc.**) Università di Trieste, Corso di Laurea triennale in Geoscienze (bachelor degree). Studente Sonya Manzan. Relatore Dr. **Renato R. Colucci**; correlatore Dr. Simone Pillon

Mentor (2019)– *Approccio fotogrammetrico basato su algoritmi Structure from Motion (SfM) per la realizzazione di un modello digitale del ghiacciaio orientale del Canin* (**B.Sc.**) Università di Trieste, Corso di Laurea triennale in Geoscienze (bachelor degree). Studente Luisa Fontanot. Relatore Dr. **Renato R. Colucci**; correlatore Dr. Simone Pillon

Mentor (2019)– *Rilievo geodetico con theodolite per il calcolo del bilancio di massa 2017-2018 del ghiacciaio orientale del Canin* (**B.Sc.**) Università di Trieste, Corso di Laurea triennale in Geoscienze (bachelor degree). Studente Giulia Casalena. Relatore Dr. **Renato R. Colucci**; correlatore Dr. Simone Pillon

Mentor (2018)– *Ricostruzione del paleoghiacciaio del Raut (Prealpi Carniche) attraverso l’uso di tool semiautomatiche in ambiente GIS* (**B.Sc.**). Università di Trieste, Corso di Laurea triennale in Geologia. Studente Luigi Casetta. Relatore Dr. **Renato R. Colucci**; correlatori Dr. Giovanni Monegato e dott. Michele Ferneti

Mentor (2018)– *Ice cave mass balance monitoring by using ground based SfM*. (**B.Sc.**) Università di Trieste, Corso di Laurea triennale in Geoscienze (bachelor degree). Studente Andrea Securo. Relatore Dr. **Renato R. Colucci**; correlatore Dr. Simone Pillon

Mentor (2017)- *Ground Penetrating Radar survey of a low-elevated underground ice body in the Dynaric Alps, Slovenia; the ice cave Paradana, Trnovski Gost* (**B.Sc.**). Università di Trieste, Corso di Laurea triennale in Geologia. studente Pietro Gutgesel. Relatore Dr. **Renato R. Colucci**; correlatore Dr. Emanuele Forte

Mentor (2017)- *Geomorphological and geophysical characterization of a low-avalanche-fed permanent snow field in the Carnic Prealps (Italy) by using groun penetrating radar and photogrammetry techniques* (**B.Sc.**). Università di Trieste, Corso di Laurea triennale in Geologia. Laureando Jury Agostinis. Relatore Dott. **Renato R. Colucci**; correlatori Dott. Emanuele Forte e dott. Simone Pillon.

Co- Mentor (2016)- *Degree day model and mean ablation rates at the Canin East small glacier in 2013 and 2014*. (December 2015) Università di Trieste, Corso di Laurea triennale in Geoscienze. Laureando Marco Venier. Relatore Prof. Renzo Mosetti, Correlatore dott. **Renato R. Colucci**.

Co- Mentor (2014)- *Volumetric reconstruction of Triglav ice patch, eastern Alps, Slovenia, Through Ground Penetrating Radar (GPR) measures.* (discussa luglio 2014) Università di Trieste, Corso di Laurea triennale in Geoscienze (**B.Sc.**). Laureanda Costanza Del Gobbo. Relatore dott. Emanuele Forte; Correlatore dott. **Renato R. Colucci.**

Co- Mentor (2014)- *Mass Balance of Canin East very small glacier (Julian Alps) in the hydrological year 2012-2013* (discussa aprile 2014). Università di Trieste, Corso di Laurea triennale in Geoscienze. Laureando Stefano Pierobon. Relatore dott. Furio Finocchiaro; Correlatore Dott. **Renato R. Colucci.**

In preparation:

Doctorate

co- Mentor (2018-2020)- *Paleoclimatic simulation of small scale weather patterns in the southeastern Alps at the end of the LGM (PhD, in preparation)* Doctorate in Earth System Physics at the ICTP and University of Trieste. Tutor Prof. Filippo Giorgi, co-tutor Dr. **Renato R. Colucci.** PhD candidate M.Sc. Costanza del Gobbo.

Ma.Sc.

Mentor- *Multi year evolution of ice in caves through SfM-MVS and GPR techniques. (M.Sc., in preparation)* student dott., Andrea Securo, Tutor Prof. **Renato R. Colucci,** co-tutors Prof. Emanuel Forte, Dr. Simone Pillon

B.Sc.

Co- Mentor- *Photogrammetric survey by using drones in glaciological applications: the very small glacier case of Prevala (Julian Alps)* Studentet Veronica Franco, relatore Dott. Emanuele Forte, correlatore Dott. **Renato R. Colucci**

Coordination and/or participation in the realization of documentaries (6)

The effect of global warming on the Marmolada glaciers in the Dolomites
Documentary by the Italian Television RAI 2 – in Production, available in January 2020

I percorsi della Bora/ *The Bora paths* – Edited by Bora Museum on behalf of ESOF2020 thanks to the support of Regione Friuli Venezia Giulia, UMFVG and CNR-ISMAR and the Interreg ITA-HR project Change We Care
<https://www.facebook.com/UMFVG/videos/312269816675652>

Communicating Climate Change – documentary/interview (Italy) made by Legambiente and Regione FVG (in Italian, English subtitles)
https://www.youtube.com/watch?v=vWX0VDK4cp8&fbclid=IwAR1q8_00770ku21Q249OchRtLoMi0dn5sD2tPF_tPVNi0ZijYPqU1YmLeg

TV web channel - project C3 – Creation and Coordination of 2 short movies/trailers and 1 documentary (in English)
Realization of short movies related to the research field of ice caves as dissemination activity of the C3 research project
<https://www.c3project.net/c3-channel>

European Meteorological Society (EMS) annual meeting 2016 – Creation and Coordination (in English)
https://www.youtube.com/watch?time_continue=1&v=JOevP0SoL-U&feature=emb_logo

Il sottile velo azzurro – A climate change documentary made by Ianus – Interview (in Italian)
Link to the trailer: <https://www.facebook.com/MeteoweekendSP/videos/2299926010240968/?v=2299926010240968>

Interviews on TV, radio, newspaper etc... (brief selection of some of the most relevant)

The Times of London (UK)

https://www.thetimes.co.uk/article/glaciers-of-italy-to-disappear-as-climate-change-heats-up-the-alps-3zf8tstk?fbclid=IwAR1cP_F36JHf5OA9RHc4AygaAB_rCux_VC3poQQPDz_crpB0JumtK0keaU

La Repubblica-Scienze (Italy)

https://www.repubblica.it/scienze/2019/11/04/news/ricerca_misurato_l_attimo_esatto_in_cui_scompare_il_permafrost-240212356/?fbclid=IwAR3vmJeCXklqbVrGhmghm--cdXEypqp9CUGqv0oH-m661n8QGSG0sLxUMg8

Sky TG 24 TV (Italy)

https://tg24.sky.it/scienze/terra/2019/11/04/scioglimento-ghiacciai-acqua-montagne-alpi.html?fbclid=IwAR3fXkbznJLN5AJirBuKkcuO1S_72ejnRiJstICHEsi9S3_GjLZc712pzXU

Primorski Dnevnik (Slovenia)

<https://www.primorski.eu/trzaska/pripravite-se-na-slovo-od-alpskih-ledenikov-YY364706?fbclid=IwAR3As6YxYaqJl06tXH98cY0OSMPC8pN600eySLQcCgAlfJVpVcenAUVIAcw>

EGU blog

https://blogs.egu.eu/geolog/2019/03/11/imaggeo-on-mondays-underground-cryosphere/?fbclid=IwAR0pr_rbUZ5Pr6unRAGEjovhSdMf-6zldbTdl4TxG35OKFhgdME8B-cH7pM

ANSA (Associated Press National Agency – Italy)

http://www.ansa.it/canale_ambiente/notizie/clima/2019/08/05/-ghiacciai-delle-alpi-dimezzati-negli-ultimi-100-anni-33b84875-3a74-437f-abb9-28c06c9c9b09.html

Wired UK (UK)

<http://www.wired.co.uk/article/inside-italys-machine>

RAI 2 TV

<http://www.cnrweb.tv/rischio-crollo-ghiacciaio-sul-monte-bianco/>

La Repubblica (Italy)

https://www.repubblica.it/viaggi/2019/08/05/news/ghiacciai_alpi_dimezzati_ultimi_cento_anni-232872348/?fbclid=IwAR1oWmmeqHnjz0yqYJ6SNo7hxSyYPBtwkAU8k2eIERRR27WUE5wwpGwCj2s

EGU blog

<https://blogs.egu.eu/divisions/cr/2019/03/01/the-hidden-part-of-the-cryosphere-ice-in-caves/?fbclid=IwAR0cNhhXPgn9nUYSxZ0hKRp-rqXcj6nH7vtwvCzrA4gDHtdLM-pX10IC1Q>

ANSA (Associated Press National Agency – Italy)

http://www.ansa.it/canale_scienza_tecnica/notizie/terra_poli/2019/11/04/il-cuore-delle-rocce-si-scalda-e-scioglie-i-ghiacci-sotterranei-40f45c25-8ee1-4cec-8f0f-c255ea7fed2c.html

Espresso – Repubblica (Italy)

<http://www.jacopopasotti.com/Dati/espressocanin.pdf>

RAI TV Veneto (Italy)

<https://www.rainews.it/tgr/veneto/articoli/2019/08/ven-Ghiacciai-Marmolada-allarme-Cnr-cambiamenti-climatici-0bcbfb9b-00be-42ff-b7a5-bf2ac948a417.html>

Montagna TV (Italy)

https://www.montagna.tv/144251/allarme-ghiacciai-alpini-dimezzati-in-100-anni?fbclid=IwAR37SbgNZs73t4ci4ijZdiH38HXz85_54qPCbwWZ5cwfXNzJSKrU1VBLSu0

Il Piccolo – Blog (Italy)

<http://brusaferro-trieste.blogautore.repubblica.it/2016/03/21/il-ricercatore-triestino-colucci-tra-i-ghiacci-dellantartide/>

OggiScienza (Italy)

<https://oggiscienza.it/2019/02/13/perche-importante-studiare-ghiaccio/>

Il Fatto Quotidiano – Scienze (Italy)

<https://www.ilfattoquotidiano.it/2019/10/07/clima-ecco-la-prova-dellimpennata-delle-temperature-lesperto-cnr-nellultimo-secolo-laumento-di-anidride-carbonica-100-volte-piu-veloce-degli-ultimi-800/5493934/?fbclid=IwAR0bQzd-thnqJgkLfhn3czetWmFMJyfvSnYytJLfcQYbV3x8Zs-9DV6DQ>

Focus

<https://www.focus.it/ambiente/natura/il-distacco-del-super-iceberg-spiegato-bene>

EstOvest, TgR RAI3 TV

About the exceptional freezing rain occurred in Slovenia in early February 2014. Climatology and causes of this event.

<http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-f5ca8c5b-8ba8-4709-886e-f88a4ac124c0-tgr.html#p=0>

(minutes 10.43 -13.49)

Language skills

Mother tongue

Italian

Other languages

Proficient in English (CEFR)

- reading (C1)
- writing (C1)
- oral communication (C1)

Basic in Slovenian

- reading (A1)
- writing (A1)
- oral communication (A1)

Basic/Independent in Spanish

- reading (B2)
- writing (A1)
- oral communication (B1)

Other skills

- Italian Mountain Rescue team member since 2012
- Climber and speleologist
- Driving License B

Professional References

Prof. Mauro Guglielmin, Ph.D.
Full Professor in Physical Geography
Insubria University
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Prof. Carlo Barbante
Director
CNR-ISP, Venice
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Dr. Fabio Trincardi, Ph.D.
Director
CNR-DSSTTA
fabio.trincardi@cnr.it

All infos presented in this CV can be verified on request with original documentation

December 2020

Renato R. Colucci, PhD
