

# STEFANO SERAFIN

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## PERSONAL

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Date and place of birth: 21.12.1977 in Como (Italy)  
Gender: male  
Nationality: Italian  
ORCID: [0000-0002-5838-7514](https://orcid.org/0000-0002-5838-7514)  
ISI Web of Science Researcher ID: [D-7660-2015](https://orcid.org/D-7660-2015)  
Scopus Author ID: [11939923400](https://orcid.org/11939923400)  
Publons ID: [a/1197597](https://orcid.org/a/1197597)  
Languages: Italian (mother tongue)  
English (fluent, CEFR level C2)  
German (basic, CEFR level A2)

## QUALIFICATIONS

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- Abilitazione Scientifica Nazionale (Italian national scientific qualification)  
04/A4 (Geophysics), associate professor level 28.8.2018 – 28.8.2024  
02/C1 (Astronomy, astrophysics, earth and planetary physics), associate professor level 11.7.2018 – 11.7.2024
- Doctorate in Environmental Engineering 20.2.2006  
University of Trento, Italy  
Dissertation: *Boundary-layer processes and thermally driven flows over complex terrain*.  
Supervisor: Prof. Dino Zardi.
- Degree in Environmental Science 12.3.2002  
University of Milano-Bicocca, Milan, Italy  
Full grades (110/110) and honours. Supervisors: Prof. Daniele Fuà, Prof. Rossella Ferretti, Prof. Lucia De Biase.
- Scientific high school leaving certificate (Diploma di maturità scientifica) 1996  
Liceo Scientifico Castelli, Saronno, Italy  
Grades: 52/60.

## ACADEMIC POSITIONS

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- University of Vienna, Austria; Department of Meteorology and Geophysics  
Senior scientist 1.6.2020 – present
- University of Innsbruck, Austria; Department of Atmospheric and Cryospheric Sciences  
Senior project scientist 1.3.2018 – 31.5.2020
- University of Vienna, Austria; Department of Meteorology and Geophysics  
Project scientist 1.9.2016 – 31.7.2018  
Assistant professor (Universitätsassistent, Post-Doc) 1.10.2010 – 31.8.2016
- University of Trento, Italy; Department of Civil and Environmental Engineering  
Post-doctoral researcher 1.3.2006 – 30.9.2010  
Doctoral student 1.11.2002 – 28.2.2006
- University of L'Aquila, Italy; Department of Physics/CETEMPS  
Research consultant 1.6.2002 – 30.11.2002

## RESEARCH INTERESTS

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- *Numerical weather prediction:*  
Boundary-layer parameterization; Large-eddy simulation; Limited-area modelling and ensemble forecasting; Parameter estimation with ensemble methods.
- *Mountain meteorology:*  
Dynamics of stratified flow over orography; Atmospheric boundary layer over complex terrain; Thermally-driven wind systems; Initiation of deep moist convection; Mountain climate.

## RESEARCH PROJECTS

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- As principal investigator:
  - 2018 – 2022 FWF (Austrian Science Fund) stand-alone project MICIA (P30808-N32), *Multiscale Interactions in Convection Initiation in the Alps*, €345'562,89.
  - 2012 – 2016 FWF (Austrian Science Fund) stand-alone project STABLEST (P24726-N27), *Stable Boundary Layer Separation and Turbulence*, €222'953,09.
- Other projects:
  - 2016 – 2019 Austrian Climate and Energy Fund, project ICE CONTROL, *Ensemble-Vereisungsprognosen als Basis zur innovativen Betriebsführung von Windkraftanlagen unter Vereisungsbedingungen*. English: *Ensemble icing forecasts supporting the operation of wind turbines under icing conditions*. PI: Dr. Alexander Beck (ZAMG).
  - 2014 EU-FP7 Research Infrastructure HYDRALAB, project HyIV-CNRS-SECORO, *Influence of secondary orography on boundary-layer separation and rotors*. PI: Dr. Ivana Stiperski (University of Innsbruck).
  - 2005 – 2008 EU-INTERREG IIIB Alpine Space, project FORALPS, *Meteo-hydrological forecast and observations for improved water resource management in the Alps*. PI: Prof. Dino Zardi (University of Trento).
  - 2006 – 2007 EU-INTERREG IIIB CADSES, project HYDROCARE, *Hydrological cycle of the CADSES region*. PI: Dr. Valerio Lucarini (CINFAL).
  - 2004 – 2005 EU-INTERREG IIIB Alpine Space, project METEORISK, *Mitigation of natural risks through improved forecasting of extreme meteorological events*. PI: Dr. Michael Staudinger (ZAMG).

## TEACHING

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- Lecturer at the University of Vienna (Faculty of Earth Sciences, Geography and Astronomy) in the B.Sc. and M.Sc. programmes in Meteorology, Academic Years between 2010–2011 and 2015–2016 and since 2020–2021.  
Lecture and exercise courses on: Fundamentals of Atmospheric Modelling  
Mesoscale Dynamics  
Mountain Meteorology  
Thermodynamics of the Atmosphere  
Exercise courses on: Applied Numerical Methods in Meteorology  
Micrometeorology  
Dynamics of the Atmosphere I  
Dynamics of the Atmosphere II  
Full record available at <https://ufind.univie.ac.at/en/person.html?id=44077&teaching=true>
- Guest lecturer (Erasmus teaching staff mobility) at the University of Trento (Doctoral School of Environmental Engineering), Academic Years 2012–2013, 2013–2014 and 2014–2015.  
Lecture course on: Geophysical Fluid Dynamics
- Assistant teacher and examiner at the University of Trento (Faculty of Engineering) in the M.Sc. programme in Environmental and Land Engineering and the B.Sc. programme in Environmental Management Engineering, A.Y. between 2003–04 and 2008–09.  
Courses on: Atmospheric Physics  
Meteorology
- Co-supervisor of 2 doctoral dissertations at the Faculty of Geo- and Atmospheric Sciences, University of Innsbruck. Supervisor of 6 bachelor theses, co-supervisor of 8 master theses and 2 doctoral dissertations at the Faculty of Earth Sciences, Geography and Astronomy, University of Vienna. Co-supervisor of 6 master and 4 bachelor theses in Environmental and Land Engineering at the Faculty of Engineering of the University of Trento.

## OTHER PROFESSIONAL ACTIVITY

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- Member of the European Geosciences Union and of the Italian Society of Atmospheric Science and Meteorology. Past member of the American Meteorological Society and of the American Geophysical Union.
- Associate editor of *Monthly Weather Review* (2016–present). Member of the editorial board of the *Bulletin of Atmospheric Science and Technology*, official journal of the Italian Society of Atmospheric Science and Meteorology (2019–present).
- Reviewing for journals (number of reviews in brackets)  
Monthly Weather Review (17), *Journal of Applied Meteorology and Climatology* (10), *Quarterly Journal of the Royal Meteorological Society* (10), *Boundary-Layer Meteorology* (10), *Journal of the Atmospheric Sciences* (7), *Atmospheric Chemistry and Physics* (6), *Meteorologische Zeitschrift* (4), *Atmospheric Research* (3), *npj Climate and Atmospheric Science* (2), *Atmosphere* (2), *Bulletin of the American Meteorological Society* (1), *Bulletin of Atmospheric Science and Technology* (1), *Environmental Fluid Mechanics* (1), *Journal of Geophysical Research: Atmospheres* (1), *Tellus-A* (1), *Advances in Meteorology* (1), *Annals of Geophysics* (1), *Frontiers in Earth Science* (1).  
Full record available at <https://publons.com/a/1197597/>.
- Reviewing for funding or other agencies (number of reviews in brackets)  
MIUR, Italian Ministry of Education, Universities and Research (1); CINECA, Italian National Supercomputing Centre (2); National Science Foundation, USA (1).
- Community service  
2014 – present      Convener or co-convener of the EGU Annual Meeting sessions on “Mountain Climatology and Meteorology” (2019-2020), “Mountain Meteorology” (2018) and “Atmospheric Processes over Complex Terrain” (2014-2015-2016).  
2017 – present      Member of the Coordination and Implementation Group of the TEAMx research programme (Multi-scale transport and exchange processes in the atmosphere over mountains – Programme and experiment).  
2018 – 2019          Coordinator of TEAMx.  
2019                  Chairman of the Programme Committee of the [35th International Conference on Alpine Meteorology](#).  
2019                  Member of the Scientific Organizing Committee and of the Local Organizing Committee of the [First TEAMx workshop](#).
- Research visits  
2015                  Department of Civil and Environmental Engineering and Earth Sciences, University of Notre Dame, South Bend, IN (USA).  
2014                  Geophysical fluid mechanics laboratory, National Center for Meteorological Research, Météo France, Toulouse (France).  
2012 and 2014        Earth Observing Laboratory, National Center for Atmospheric Research, Boulder, CO (USA).

## INVITED TALKS

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- TEAMx: A research programme on observing and modelling the mountain boundary layer.  
Meteorological Institute Munich, Ludwig-Maximilians-Universität München, Munich (D), 14.1.2020. invited by Dr. Tobias Zinner.
- Observations and modelling of atmospheric rotors.  
Department of Atmospheric and Cryospheric Science, University of Innsbruck (A), 25.4.2018, invited by Prof. Mathias Rotach.  
Institute of Atmospheric Sciences and Climate, National Research Council of Italy, Bologna (I), 14.5.2015, invited by Dr. Silvio Davolio.
- Daytime processes in the atmospheric boundary layer over mountainous terrain.  
Department of Civil and Environmental Engineering and Earth Sciences, University of Notre Dame, IN (USA), 10.2.2015, invited by Prof. Harindra J.S. Fernando.
- A case study of nonstationary boundary-layer separation and rotor formation.  
National Center for Atmospheric Research, Boulder, CO (USA), 28.8.2012, invited by Dr. Vanda Grubišić.  
Department of Atmospheric Sciences, University of Wyoming, Laramie, WY (USA), 15.8.2012, invited by Dr. Samuel Haimov.  
Department of Meteorology and Geophysics, University of Innsbruck (A), 16.5.2012, invited by Prof. Alexander Gohm.
- Idealized simulations of thermally driven winds over mountainous terrain.  
Department of Geophysics, University of Zagreb (HR), 24.01.2012, invited by Prof. Branko Grisogono.  
Department of Atmospheric Physics, Johannes-Gutenberg University of Mainz (D), 30.08.2011, invited by Prof. Volkmar Wirth.  
Department of Meteorology and Geophysics, University of Vienna (A), 30.11.2010, invited by Prof. Leopold Haimberger.

## PARTICIPATION TO CONFERENCES

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- 35th International Conference on Alpine Meteorology; Riva del Garda (I), 2.9.–6.9.2019
- EGU General Assembly 2019; Vienna (A), 8.4–12.4.2019
- EGU General Assembly 2018; Vienna (A), 9.4–13.4.2018
- 34th International Conference on Alpine Meteorology; Reykjavík (IS), 19.6.–23.6.2017
- EGU General Assembly 2016; Vienna (A), 17.4–22.4.2016
- 8th European Conference on Severe Storms; Wiener Neustadt (A), 14.9–18.9.2015
- 33rd International Conference on Alpine Meteorology; Innsbruck (A), 31.8.–4.9.2015
- 26th IUGG Assembly 2015; Prague (CZ), 22.6.–2.7.2015
- EGU General Assembly 2015; Vienna (A), 12.4.–17.4.2015
- 21st Symposium on Boundary Layers and Turbulence; Leeds (UK), 9.6.–13.6.2014
- EGU General Assembly 2014; Vienna (A), 27.4–2.5.2014
- AGU Fall Meeting 2013; San Francisco (USA), 9.12.–13.12.2013
- 32nd International Conference on Alpine Meteorology; Kranjska Gora (SI), 3.6.–7.6.2013
- EGU General Assembly 2013; Vienna (A), 7.4.–12.4.2013
- 15th Conference on Mountain Meteorology; Steamboat Springs (USA), 20.8.–24.8.2012
- EGU General Assembly 2012; Vienna (A), 23.4.–27.4.2012
- 4. Österreichischer Meteorologentag; Klagenfurt (A), 3.1.–4.11.2011
- 31st International Conference on Alpine Meteorology; Aviemore (UK), 23.5.–27.5.2011
- 30th International Conference on Alpine Meteorology; Rastatt (D), 11.5.–15.5.2009
- Convegno Nazionale di Fisica della Terra Fluida e Problematiche Affini; Ischia (I), 11.6.–15.6.2007
- 29th International Conference on Alpine Meteorology; Chambéry (F), 4.6.–8.6.2007
- EGU General Assembly 2007; Vienna (A), 16.4.–20.4.2007
- 28th International Conference on Alpine Meteorology and MAP Meeting; Zadar (HR), 23.5.–27.5.2005
- XXIX Convegno di Idraulica e Costruzioni Idrauliche; Trento (I), 7.9.–10.9.2004
- 27th International Conference on Alpine Meteorology and MAP Meeting; Brig (CH), 18.5.–23.5.2003

## PARTICIPATION TO TRAINING COURSES AND WORKSHOPS

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- First TEAMx Workshop  
Organizers: University of Trento, University of Innsbruck, Italian Society of Atmospheric Science and Meteorology Rovereto (I), 28.8.–30.8.2019
- Verification in complex terrain: Spatial Verification Methods and NWP Model Performance  
Organizer: University of Vienna, Department of Meteorology and Geophysics  
Vienna (A), 8.7.–9.7.2019
- Observational campaigns for better weather forecasts  
Organizer: ECMWF, European Centre for Medium-Range Weather Forecasts  
Reading (UK), 10.6.–13.6.2019
- Synthesis Workshop on Mountain Meteorology and Climatology: Drivers, Processes and Related Impacts  
Organizer: MRI, Mountain Research Initiative  
Vienna (A), 12.4.2019
- Annual Seminar 2017. Ensemble prediction: past, present and future  
Organizer: ECMWF, European Centre for Medium-Range Weather Forecasts  
Reading (UK), 11.9.–14.9.2017

- Training course on Predictability and Ocean-Atmosphere Ensemble Forecasting  
Organizer: ECMWF, European Centre for Medium-Range Weather Forecasts  
Reading (UK), 8.5.–12.5.2017
- Workshop on Advances in Meso- and Micrometeorology  
Organizer: University of Zagreb, Faculty of Science, Department of Geophysics  
Donja Stubica (HR), 3.11.–4.11.2014
- Wave-Turbulence Interactions in Stable Atmospheric Boundary Layers  
Organizer: Geophysical Turbulence Program (GTP), NCAR  
Boulder (USA), 24.7.–25.7.2012
- Croatian-USA Workshop on Mesometeorology  
Organizer: Croatian Meteorological and Hydrological Service  
Pisarovina (HR), 18.6.–20.6.2012
- HiRCoT 2012 Workshop: High Resolution Modelling in Complex Terrain  
Organizer: University of Natural Resources and Life Sciences, Institute of Meteorology  
Vienna (A), 21.2.–23.2.2012
- 19° Scuola Estiva di Calcolo Parallelo (19th Summer School on High Performance Computing)  
Organizer: CINECA (Italian National Supercomputing Centre)  
Bologna (I), 5.7.–16.7.2010
- Joint NCAR-NCAS WRF Users Workshop and Tutorial  
Organizer: NCAR, NCAS  
Cambridge (UK), 28.9.–2.10.2009
- GRASS, Free and Open Source GIS: Theory and Applications  
Organizer: University of Trento, Department of Civil and Environmental Engineering  
Trento (I), 27.6.–30.6.2006
- Summer School on Mountain Meteorology: Orographic effects on precipitation  
Organizer: University of Trento, Department of Civil and Environmental Engineering  
Trento (I), 25.7.–30.7.2004
- Meteorology and Regional Weather Forecasting  
Organizer: University of Trento, Faculty of Mathematical, Physical and Natural Sciences  
Trento (I), 1.12.–5.12.2003
- Prediction of Turbulent Flows  
Organizer: Isaac Newton Institute for Mathematical Sciences  
Cambridge (UK), 7.11.2003
- 5th International SRNWP-Workshop on Non-Hydrostatic Modelling  
Organizer: Deutscher Wetterdienst  
Bad-Orb (D), 27.10.–29.10.2003
- Summer School on Mountain Meteorology: Thermally driven winds in mountainous terrain  
Organizer: University of Trento, Department of Civil and Environmental Engineering  
Trento (I), 17.8.–22.8.2003
- Grand Combin Summer School on Fundamental Problems in Geophysical and Environmental Fluid Mechanics: Physics and Predictability of Rainfall and Floods  
Organizer: CIMA, International Centre on Environmental Monitoring  
Saint-Oyen (I), 25.6.–5.7.2002

## AWARDS

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- 2005: 2<sup>nd</sup>-best student poster presentation at the 28th International Conference on Alpine Meteorology and MAP Meeting.
- 2002: 3-yr scholarship at the Doctoral School of Environmental Engineering, University of Trento (first candidate in ranking).

## TECHNICAL COMPETENCE

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- Numerical weather prediction codes: WRF, CM1, ARPS, MM5. Programming languages: Python, MATLAB, NCL, Linux/Unix shell scripting, Fortran.

## A Peer-reviewed scientific articles

- 1 Strauss, L., **S. Serafin** and M. Dorninger (2020): Skill and potential economic value of forecasts of ice accretion on wind turbines. *J. Appl. Meteor. Climatol.*, in press.  
DOI: [10.1175/JAMC-D-20-0025.1](https://doi.org/10.1175/JAMC-D-20-0025.1)
- 2 Fuchs, F., F.M. Schneider, P. Kolínský, **S. Serafin**, G. Bokelmann (2019): Rich observations of local and regional infrasound phases made by the AlpArray seismic network after refinery explosion. *Sci. Rep.*, **9**, 13027.  
DOI: [10.1038/s41598-019-49494-2](https://doi.org/10.1038/s41598-019-49494-2)  
Scopus EID: [2-s2.0-85072011387](https://scopus.com/record/display?id=2-s2.0-85072011387)  
Web Of Science accession number: [000484988100001](https://www.webofscience.com/doi/10.1093/oxfordjournals.000484988100001)
- 3 **Serafin, S.**, L. Strauss and M. Dorninger (2019): Ensemble reduction using cluster analysis. *Q. J. R. Meteorol. Soc.*, **145**, 659-674.  
DOI: [10.1002/qj.3458](https://doi.org/10.1002/qj.3458)  
Scopus EID: [2-s2.0-85061057940](https://scopus.com/record/display?id=2-s2.0-85061057940)  
Web Of Science accession number: [000463971800017](https://www.webofscience.com/doi/10.1093/oxfordjournals.000463971800017)
- 4 Schneider, F.M., F. Fuchs, P. Kolínský, E. Caffagni, **S. Serafin**, M. Dorninger, G. Bokelmann, AlpArray Working Group (2018): Seismo-acoustic signals of the Baumgarten (Austria) gas explosion detected by the AlpArray seismic network. *Earth and Planetary Science Letters*, **502**, 104-114.  
DOI: [10.1016/j.epsl.2018.08.034](https://doi.org/10.1016/j.epsl.2018.08.034)  
Scopus EID: [2-s2.0-85053396519](https://scopus.com/record/display?id=2-s2.0-85053396519)  
Web Of Science accession number: [000447567800010](https://www.webofscience.com/doi/10.1093/oxfordjournals.000447567800010)
- 5 **Serafin, S.**, B. Adler, J. Cuxart, S.F.J. De Wekker, A. Gohm, B. Grisogono, N. Kalthoff, D.J. Kirshbaum, M.W. Rotach, J. Schmidli, I. Stiperski, Ž. Večenaj and D. Zardi (2018): Exchange processes in the atmospheric boundary layer over mountainous terrain. *Atmosphere*, **9**, 102 (special issue on "Atmospheric Processes over Complex Terrain").  
DOI: [10.3390/atmos9030102](https://doi.org/10.3390/atmos9030102)  
Scopus EID: [2-s2.0-85044034187](https://scopus.com/record/display?id=2-s2.0-85044034187)  
Web Of Science accession number: [000428305800024](https://www.webofscience.com/doi/10.1093/oxfordjournals.000428305800024)
- 6 Kirshbaum, D.J., B. Adler, N. Kalthoff, C. Barthlott and **S. Serafin** (2018): Moist orographic convection: physical mechanisms and links to surface-exchange processes. *Atmosphere*, **9**, 80 (special issue on "Atmospheric Processes over Complex Terrain").  
DOI: [10.3390/atmos9030080](https://doi.org/10.3390/atmos9030080)  
Scopus EID: [2-s2.0-85042554645](https://scopus.com/record/display?id=2-s2.0-85042554645)  
Web Of Science accession number: [000428305800002](https://www.webofscience.com/doi/10.1093/oxfordjournals.000428305800002)
- 7 Scheffknecht, P., **S. Serafin** and V. Grubišić (2017): A long-lived supercell over mountainous terrain. *Q. J. R. Meteorol. Soc.*, **143**, 2973-2986.  
DOI: [10.1002/qj.3127](https://doi.org/10.1002/qj.3127)  
Scopus EID: [2-s2.0-85039422816](https://scopus.com/record/display?id=2-s2.0-85039422816)  
Web Of Science accession number: [000418796900001](https://www.webofscience.com/doi/10.1093/oxfordjournals.000418796900001)
- 8 Giovannini, L., L. Laiti, **S. Serafin** and D. Zardi (2017): The thermally driven diurnal wind system of the Adige Valley in the Italian Alps. *Q. J. R. Meteorol. Soc.*, **143**, 2389-2402.  
DOI: [10.1002/qj.3092](https://doi.org/10.1002/qj.3092)  
Scopus EID: [2-s2.0-85026296179](https://scopus.com/record/display?id=2-s2.0-85026296179)  
Web Of Science accession number: [000414551000006](https://www.webofscience.com/doi/10.1093/oxfordjournals.000414551000006)
- 9 **Serafin, S.**, L. Strauss and V. Grubišić (2017): Climatology of westerly wind events in the lee of the Sierra Nevada. *J. Appl. Meteor. Climatol.*, **56**, 1003-1023.  
DOI: [10.1175/JAMC-D-16-0244.1](https://doi.org/10.1175/JAMC-D-16-0244.1)  
Scopus EID: [2-s2.0-85017500895](https://scopus.com/record/display?id=2-s2.0-85017500895)  
Web Of Science accession number: [000399680900001](https://www.webofscience.com/doi/10.1093/oxfordjournals.000399680900001)
- 10 Sachspenger, J., **S. Serafin**, V. Grubišić, I. Stiperski and A. Paci (2017): The amplitude of lee waves on the boundary-layer inversion. *Q. J. R. Meteorol. Soc.*, **143**, 27-36.  
DOI: [10.1002/qj.2915](https://doi.org/10.1002/qj.2915)  
Scopus EID: [2-s2.0-85009228779](https://scopus.com/record/display?id=2-s2.0-85009228779)  
Web Of Science accession number: [000394990800003](https://www.webofscience.com/doi/10.1093/oxfordjournals.000394990800003)

- 11 Stiperski, I., **S. Serafin**, A. Paci, H. Ágústsson, A. Belleudy, R. Calmer, K. Horvath, C. Knigge, J. Sachsperger, L. Strauss and V. Grubišić (2017): Water tank experiments on stratified flow over double mountain-shaped obstacles at high-Reynolds number. *Atmosphere*, **8**, 13 (special issue on "Atmospheric Gravity Waves").  
DOI: [10.3390/atmos8010013](https://doi.org/10.3390/atmos8010013)  
Scopus EID: [2-s2.0-85011032501](https://scopus.com/record/display?id=s2.0-85011032501)  
Web Of Science accession number: [000396165100012](https://www.webofscience.com/doi/10.1093/acprof:oso/9780190625000.003.0003)
- 12 **Serafin, S.**, S.F.J. De Wekker and J.C. Knievel (2016): A mesoscale model-based climatology of nocturnal boundary-layer characteristics over the complex terrain of north-western Utah. *Bound.-Layer Meteorol.*, **159**, 495-519.  
DOI: [10.1007/s10546-015-0044-6](https://doi.org/10.1007/s10546-015-0044-6)  
Scopus EID: [2-s2.0-84930268467](https://scopus.com/record/display?id=s2.0-84930268467)  
Web Of Science accession number: [000376412400003](https://www.webofscience.com/doi/10.1093/acprof:oso/9780190625000.003.0003)
- 13 Sachsperger, J., **S. Serafin** and V. Grubišić (2016): Dynamics of rotor formation in uniformly stratified two-dimensional flow over a mountain. *Q. J. R. Meteorol. Soc.*, **142**, 1201-1212.  
DOI: [10.1002/qj.2746](https://doi.org/10.1002/qj.2746)  
Scopus EID: [2-s2.0-84977901839](https://scopus.com/record/display?id=s2.0-84977901839)  
Web Of Science accession number: [000375935600001](https://www.webofscience.com/doi/10.1093/acprof:oso/9780190625000.003.0003)
- 14 Strauss, L., **S. Serafin** and V. Grubišić (2016): Atmospheric rotors and severe turbulence in a long deep valley. *J. Atmos. Sci.*, **73**, 1481-1506.  
DOI: [10.1175/JAS-D-15-0192.1](https://doi.org/10.1175/JAS-D-15-0192.1)  
Scopus EID: [2-s2.0-84962206253](https://scopus.com/record/display?id=s2.0-84962206253)  
Web Of Science accession number: [000372403500003](https://www.webofscience.com/doi/10.1093/acprof:oso/9780190625000.003.0003)
- 15 Strauss, L., **S. Serafin**, S.J. Haimov and V. Grubišić (2015): Turbulence in breaking mountain waves and atmospheric rotors estimated from airborne in situ and Doppler radar measurements. *Q. J. R. Meteorol. Soc.*, **141**, 3207-3225.  
DOI: [10.1002/qj.2604](https://doi.org/10.1002/qj.2604)  
Scopus EID: [2-s2.0-84952300081](https://scopus.com/record/display?id=s2.0-84952300081)  
Web Of Science accession number: [000366860500023](https://www.webofscience.com/doi/10.1093/acprof:oso/9780190625000.003.0003)
- 16 Sachsperger, J., **S. Serafin** and V. Grubišić (2015): Lee waves on the boundary-layer inversion and their dependence on free-atmospheric stability. *Front. Earth Sci.*, **3**, 70 (research topic on "The Atmosphere over Mountainous Regions").  
DOI: [10.3389/feart.2015.00070](https://doi.org/10.3389/feart.2015.00070)  
Scopus EID: [2-s2.0-85016403141](https://scopus.com/record/display?id=s2.0-85016403141)  
Web Of Science accession number: [000421619700040](https://www.webofscience.com/doi/10.1093/acprof:oso/9780190625000.003.0003)
- 17 French, J.R., S.J. Haimov, L.D. Oolman, V. Grubišić, **S. Serafin**, and L. Strauss (2015): Wave-induced boundary-layer separation in the lee of the Medicine Bow Mountains. Part I: Observations. *J. Atmos. Sci.*, **72**, 4845-4863.  
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## B Indexed reports and conference proceedings

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- 26 **Serafin, S.**, A. Bertò, and D. Zardi (2005): Application of cluster analysis techniques to the verification of quantitative precipitation forecasts. *28th International Conference on Alpine Meteorology and MAP Meeting*, Zadar (HR), 23.5.–27.5.2005. *Croatian Meteorological Journal*, **40**, 395-398.  
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- 27 Richard E., N. Asencio, R. Benoit, A. Buzzi, R. Ferretti, P. Malguzzi, **S. Serafin**, G. Zängl and J.F. Georgis (2002): Intercomparison of the simulated precipitation fields of the MAP/IOP2b with different high-resolution models. *10th Conference on Mountain Meteorology and MAP Meeting*, Park City (USA), 17.6.–21.6.2002.  
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## C Grey literature

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- 29 Arnold, D., D. Morton, I. Schicker, P. Seibert, M.W. Rotach, K. Horvath, J. Dudhia, T. Satomura, M. Müller, G. Zängl, T. Takemi, **S. Serafin**, J. Schmidli and S. Schneider (2012): High Resolution Modelling in Complex Terrain. Report on the HiRCoT 2012 Workshop, Vienna, 21-23 February 2012. BOKU-Met Report 21. Institut für Meteorologie, Universität für Bodenkultur, Wien. 44 pp. ISSN 1994-4179.  
URL: [https://meteo.boku.ac.at/report/BOKU-Met\\_Report\\_21\\_online.pdf](https://meteo.boku.ac.at/report/BOKU-Met_Report_21_online.pdf)
- 30 **Serafin, S.** (2006): Boundary-layer processes and thermally driven flows over complex terrain. Università degli Studi di Trento. 194 pp. ISBN-10: 88-8443-131-X, ISBN-13: 978-88-8448-131-8.  
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## D International conference contributions

Key: (T) Talk; (P) Poster; **Highlighted items** were presented personally.

Awarded conference contributions: **48**—Second best student poster presentation award to Lukas Strauss. **51**—Best student oral presentation award to Johannes Sachsperger; **61**—Best student poster presentation award to Lukas Strauss; **69**—Outstanding



student poster award to Lukas Strauss; 75–Best student poster presentation award to Johannes Sachsperger; 81–Best student poster award to Valerie-Marie Kumer; 107–Second best student poster presentation award to Stefano Serafin.

- 1 (P) Göbel, M., **S. Serafin** and M.W. Rotach (2020): Model resolution dependence of convection initiation by orographically-induced thermal circulations. *EGU General Assembly 2020*, Vienna (A), 4.5.–8.5.2020.
- 2 (T) Strauss, L., **S. Serafin**, M. Dorninger (2019): Very uncertain observations – Exploring the impact of observational uncertainty on the skill of icing forecasts. *EMS Annual Meeting*, Copenhagen (DK), 9.9.–13.9.2019.
- 3 (T) Rotach, M.W., M. Arpagaus, J. Cuxart, S.F.J. De Wekker, V. Grubišić, N. Kalthoff, D.J. Kirshbaum, M. Lehner, S. Mobbs, A. Paci, E. Palazzi, **S. Serafin** and D. Zardi (2019): The First TEAMx Workshop - A summary of achievements after a week-end of contemplation. *35th International Conference on Mountain Meteorology*, Riva del Garda (I), 2.9.–6.9.2019.
- 4 (P) Siller, M., **S. Serafin**, and M. W. Rotach (2019): Convection initiation favoured by large-amplitude mountain waves. *35th International Conference on Mountain Meteorology*, Riva del Garda (I), 2.9.–6.9.2019.
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- 6 (P) Castelli, E., B.M. Dinelli, E. Papandrea, S. Casadio, M.M. Miglietta, A. Tiesi, J. Sachsperger, **S. Serafin** (2019): Atmospheric lee waves over the Aegean Sea detected from AIRWAVE Total Column Water Vapor estimates and simulated with WRF. *35th International Conference on Mountain Meteorology*, Riva del Garda (I), 2.9.–6.9.2019.
- 7 (T) Rotach, M.W., M. Arpagaus, J. Cuxart, S.F.J. De Wekker, V. Grubišić, N. Kalthoff, D.J. Kirshbaum, M. Lehner, S. Mobbs, A. Paci, E. Palazzi, **S. Serafin** and D. Zardi (2019): TEAMx. Multi-scale Transport and Exchange Processes in the Atmosphere over Mountains - Programme and Experiment. *27th IUGG Assembly 2019*, Montréal (CA), 8.7.–18.7.2019.
- 8 (P) **Serafin, S.**, M.W. Rotach, M. Lehner, B. Goger, and I. Stiperski (2019): Modelling and observing the atmospheric boundary layer over mountains. *ECMWF Workshop: Observational campaigns for better weather forecasts*, Reading (UK), 10.6.–13.6.2018.
- 9 (T) Rotach, M.W., M. Arpagaus, J. Cuxart, S.F.J. De Wekker, V. Grubišić, N. Kalthoff, D.J. Kirshbaum, M. Lehner, S. Mobbs, A. Paci, E. Palazzi, **S. Serafin** and D. Zardi (2019): TEAMx, a coordinated effort to investigate transport and exchange processes in the atmosphere over mountains. *ECMWF Workshop: Observational campaigns for better weather forecasts*, Reading (UK), 10.6.–13.6.2018.
- 10 (P) Siller, M., **S. Serafin** and M.W. Rotach (2019): Convection initiation in connection with a mountain wave episode. *EGU General Assembly 2019*, Vienna (A), 7.4.–12.4.2019.
- 11 (T) Fuchs, F., F. M. Schneider, P. Kolínský, **S. Serafin**, G. Bokelmann and the AlpArray Working Group (2019): Complex propagation of explosion-generated infrasound revealed by the large-scale AlpArray seismic network. *EGU General Assembly 2019*, Vienna (A), 7.4.–12.4.2019.
- 12 (T) Strauss, L., **S. Serafin**, M. Dorninger, S. Bourgeois, T. Burchhart, and A. Beck (2018): Can we predict icing of structures and wind turbines reliably using high-resolution ensemble forecasts? *EMS Annual Meeting: European Conference for Applied Meteorology and Climatology*, Budapest (H), 3.9.–7.9.2018.
- 13 (T) Schneider, F., F. Fuchs, P. Kolínský, E. Caffagni, M. Dorninger, **S. Serafin**, G. Bokelmann and the AlpArray Working Group (2018): Seismo-acoustic signals of the Baumgarten (Austria) gas explosion detected by the AlpArray seismic network. *36th General Assembly of the European Seismological Commission*, Valletta (MT), 2.9.–7.9.2018.
- 14 (P) Grubišić, V., **S. Serafin**, L. Strauss, and J. Sachsperger (2018): Observations and Modeling of Atmospheric Rotors. *18th Conference on Mountain Meteorology*, Santa Fe (USA), 25.6.–29.6.2018.
- 15 (T) Rotach, M.W., M. Arpagaus, J. Cuxart, S.F.J. De Wekker, V. Grubišić, N. Kalthoff, D.J. Kirshbaum, M. Lehner, S.D. Mobbs, A. Paci, **S. Serafin** and D. Zardi (2018): Why You Should Remember What TEAMx Means. *18th Conference on Mountain Meteorology*, Santa Fe (USA), 25.6.–29.6.2018.
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- 20 (T) Strauss, L., **S. Serafin**, M. Dorninger, S. Bourgeois and T. Burchhart (2018): Assessment of high-resolution probabilistic forecasts of icing in Germany for the winter 2016/17. *Winterwind, International Wind Energy Conference 2018*, Åre (SE), 5.2.–7.2.2018.
- 21 (T) Burchhart, T., M. Fink, L. Strauss, **S. Serafin**, M. Dorninger, A. Beck, C. Wittmann, S. Bourgeois, R. Cattin (2018): ICE CONTROL: Potential of innovative icing measurements and icing forecasts to optimize the operation of wind farms during icing conditions. *Winterwind, International Wind Energy Conference 2018*, Åre (SE), 5.2.–7.2.2018.
- 22 (T) Bourgeois, S., P. Froidevaux, T. Burchhart, M. Fink, L. Strauss, **S. Serafin**, M. Dorninger, A. Beck, C. Wittmann, F. Weidle (2018): Forecasting ice accretion on rotor blades: Validation against webcam and ice detectors. *Winterwind, International Wind Energy Conference 2018*, Åre (SE), 5.2.–7.2.2018.
- 23 (T) Strauss, L., **S. Serafin** and M. Dorninger (2017): Probabilistic forecasts of ice formation on wind turbines with a limited-area ensemble prediction system. *EMS Annual Meeting: European Conference for Applied Meteorology and Climatology*, Dublin (IE), 4.9.–8.9.2017.
- 24 (P) **Serafin, S.**, L. Strauss and M. Dorninger (2017): A comparison of ensemble reduction methods. *EMS Annual Meeting: European Conference for Applied Meteorology and Climatology*, Dublin (IE), 4.9.–8.9.2017.
- 25 (T) Dorninger, M., L. Strauss, **S. Serafin**, A. Beck, C. Wittmann, F. Weidle, F. Meier, S. Bourgeois, R. Cattin, T. Burchhart and M. Fink (2017): ICE CONTROL – The challenge of reasonable icing forecasts for optimizing wind energy production *EMS Annual Meeting: European Conference for Applied Meteorology and Climatology*, Dublin (IE), 4.9.–8.9.2017.
- 26 (T) Sachsperger, J., **S. Serafin**, V. Grubišić, I. Stiperski and A. Paci (2017): A simple model for the amplitude of lee waves on the boundary-layer inversion. *34th International Conference on Alpine Meteorology*, Reykjavík (IS), 19.6.–23.6.2017.
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- 28 (T) Grubišić, V., L. Strauss and **S. Serafin** (2017): Atmospheric rotors, downslope windstorms and severe turbulence in a deep long valley. *34th International Conference on Alpine Meteorology*, Reykjavík (IS), 19.6.–23.6.2017.
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- 30 (P) Stiperski, I., **S. Serafin**, A. Paci, V. Krieger, H. Ágústsson, A. Belleudy, R. Calmer, K. Horvath, C. Knigge, J. Sachsperger, L. Strauss, V. Grubišić (2017): Water tank experiments on stratified flow over double mountain-shaped obstacles at high-Reynolds number *34th International Conference on Alpine Meteorology*, Reykjavík (IS), 19.6.–23.6.2017.
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- 32 (P) Weissinger, M., L. Strauss, **S. Serafin**, M. Dorninger, T. Burchhart and M. Fink (2017): Synoptic versus regional causes of icing on wind turbines at an exposed wind farm site in Germany. *EGU General Assembly 2017*, Vienna (A), 23.4.–28.4.2017.
- 33 (T) Strauss, L., **S. Serafin**, M. Dorninger, A. Beck, C. Wittmann, S. Bourgeois, R. Cattin and T. Burchhart (2017): ICE CONTROL– Measurements and probabilistic forecasting of icing events in Austria and Germany. *Winterwind, International Wind Energy Conference 2017*, Skellefteå (SE), 6.2.–8.2.2017.
- 34 (T) Giovannini, L., L. Laiti, D. Zardi and **S. Serafin** (2016): Investigation of the diurnal wind system in the Alpine Adige Valley. *16th EMS Annual Meeting & 11th European Conference on Applied Climatology (ECAC)*, Trieste (I), 12.9.–16.9.2016.
- 35 (P) Giovannini, L., L. Laiti, **S. Serafin** and D. Zardi (2016): Investigation of the diurnal wind system in the Alpine Adige Valley. *17th Conference on Mountain Meteorology*, Burlington (USA), 27.6.–1.7.2016.
- 36 (P) Sachsperger, J., **S. Serafin**, I. Stiperski, V. Grubišić, A. Paci and A. Belleudy (2016): The amplitude of lee waves forming on the boundary layer inversion. *17th Conference on Mountain Meteorology*, Burlington (USA), 27.6.–1.7.2016.
- 37 (P) **Serafin, S.** and S.F.J. De Wekker (2016): A modelling study of the factors governing the convective boundary layer height over isolated mountain ridges. *17th Conference on Mountain Meteorology*, Burlington (USA), 27.6.–1.7.2016.
- 38 (P) Strauss, L., **S. Serafin** and V. Grubišić (2016): Observations and numerical simulations of downslope flow separation at a valley inversion. *EGU General Assembly 2016*, Vienna (A), 17.4.–22.4.2016.
- 39 (P) Sachsperger, J., **S. Serafin**, I. Stiperski and V. Grubišić (2016): An analytical model for the amplitude of lee waves forming on the boundary layer inversion. *EGU General Assembly 2016*, Vienna (A), 17.4.–22.4.2016.
- 40 (T) Sachsperger, J., **S. Serafin** and V. Grubišić (2016): Dynamics of lee waves on the boundary layer inversion. *EGU General Assembly 2016*, Vienna (A), 17.4.–22.4.2016.

- 41 (T) De Wekker, S.F.J., and **S. Serafin** (2016): Investigating convective boundary layer heights over mountain ridges. *96th American Meteorological Society Annual Meeting*, New Orleans (USA), 10.1.–14.1.2016.
- 42 (T) Silver, Z., R. Dimitrova, T. Zsedrovits, H.J.S. Fernando, L.S. Leo, S. Di Sabatino, **S. Serafin**, Y. Wang, E. Creegan, M. Felton and C. Hocut (2016): WRF Simulations of Synoptic Flow Modification over Mountainous Terrain during MATERHORN Observation Periods. *96th American Meteorological Society Annual Meeting*, New Orleans (USA), 10.1.–14.1.2016.
- 43 (P) Krennert, T., A. Kainz and **S. Serafin** (2015): An extended perspective for Deep Moist Convective Initiation in the Alpine Region? *European Conference on Severe Storms 2015*, Wiener Neustadt (A), 14.9.–18.9.2015.
- 44 (P) Scheffknecht, P., **S. Serafin** and V. Grubišić (2015): A long-lived supercell in Alpine environment. *European Conference on Severe Storms 2015*, Wiener Neustadt (A), 14.9.–18.9.2015.
- 45 (P) Giovannini, L., L. Laiti, **S. Serafin** and D. Zardi (2015): A climatological analysis of diurnal winds in the Adige valley in the Alps. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 46 (T) **Serafin, S.** and S.F.J. De Wekker (2015): A factor-separation study of convective boundary layer development over non-uniform land use and topography. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 47 (T) Strauss, L., **S. Serafin** and V. Grubišić (2015): Severe turbulence in a deep valley associated with rotors and interacting cross-mountain and up-valley flows. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 48 (P) Strauss, L., **S. Serafin** and V. Grubišić (2015): Using Google Earth for visualization of meteorological data in complex terrain. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 49 (P) Scheffknecht, P., **S. Serafin** and V. Grubišić (2015): Simulations of a long-lived supercell over complex terrain. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 50 (P) Sachsperger, J., **S. Serafin** and V. Grubišić (2015): Analogies between wave trapping- and interfacial wave theory. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 51 (T) Sachsperger, J., **S. Serafin** and V. Grubišić (2015): The impact of mountain width and stratification on wave-induced rotor formation. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 52 (T) De Wekker, S.F.J., **S. Serafin**, and J. Knievel (2015): A mesoscale model-based climatology of daytime atmospheric boundary layer heights over complex terrain. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 53 (P) Stiperski, I., H. Ágústsson, P.G. Baines, A. Belleudy, V. Grubišić, K. Horvath, C. Knigge, A. Paci, J. Sachsperger, **S. Serafin** and L. Strauss (2015): Observations of lee wave and rotor development over double ridges in a stratified water tank. *33rd International Conference on Alpine Meteorology*, Innsbruck (A), 31.8.–4.9.2015.
- 54 (T) Sachsperger, J., **S. Serafin** and V. Grubišić (2015): Dynamics of Rotor Formation in Single-Layer Mountain Flows. *26th IUGG Assembly 2015*, Prague (CZ), 22.6.–2.7.2015.
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- 57 (P) Strauss, L., **S. Serafin** and V. Grubišić (2015): Mountain wave-induced turbulence: Elevated turbulence zones over a double mountain ridge. *EGU General Assembly 2015*, Vienna (A), 12.4.–17.4.2015.
- 58 (T) Sachsperger, J., **S. Serafin** and V. Grubišić (2015): Interfacial and trapped waves in flows over mountains. *EGU General Assembly 2015*, Vienna (A), 12.4.–17.4.2015.
- 59 (T) Giovannini, L., L. Laiti, **S. Serafin** and D. Zardi (2015): A climatological analysis of diurnal winds in the Adige Valley in the Alps. *5th International Conference on Meteorology and Climatology of the Mediterranean*, Istanbul (TR), 2.3.–4.3.2015.
- 60 (P) De Wekker, S.F.J., and **S. Serafin** (2014): Understanding the spatial variability of convective boundary layer depth around an isolated mountain with a factor separation approach. *16th Conference on Mountain Meteorology*, San Diego (USA), 18.8.–22.8.2014.
- 61 (P) Strauss, L., V. Grubišić, **S. Serafin** and R. Mühlgassner (2014): Mountain Waves and Rotors - Revisiting the Concept of the "Lower Turbulent Zone". *16th Conference on Mountain Meteorology*, San Diego (USA), 18.8.–22.8.2014.
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- 79 (P) Zardi, D., and **S. Serafin** (2013): An analytic solution for periodic thermally-driven flows over an infinite slope. *EGU General Assembly 2013*, Vienna (A), 7.4.–12.4.2013.
- 80 (P) Strauss, L., **S. Serafin**, and V. Grubišić (2013): Estimating turbulence in mountainous regions from airborne *in situ* and remotely-sensed data. *EGU General Assembly 2013*, Vienna (A), 7.4.–12.4.2013.
- 81 (P) Kumer V.-M., V. Grubišić, M. Dorninger, **S. Serafin**, L. Strauss and R. Zauner (2013): Turbulence analysis of lidar wind measurements at a windpark in Lower Austria. *EWEA Annual Event 2013*, Vienna (A), February 4-February 7 2013.
- 82 (P) **Serafin, S.**, and D. Zardi (2012): An evaluation of the volume-effect theory by means of large-eddy simulations. *15th Conference on Mountain Meteorology*, Steamboat Springs (USA), 20.8.–24.8.2012.
- 83 (P) Strauss, L., **S. Serafin** and V. Grubišić (2012): Measuring turbulence from airborne *in situ* and radar data recorded during an event of wave-induced boundary-layer separation. *15th Conference on Mountain Meteorology*, Steamboat Springs (USA), 20.8.–24.8.2012.
- 84 (P) **Serafin, S.**, L. Strauss and V. Grubišić (2012): Idealized simulations of wave-induced boundary-layer separation in the lee of mesoscale topography. *15th Conference on Mountain Meteorology*, Steamboat Springs (USA), 20.8.–24.8.2012.
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- 93 (T) Zardi, D., and **S. Serafin** (2011): An analytic solution for periodic thermally driven flows on an infinite slope—Defant (1949) revisited. *31st International Conference on Alpine Meteorology*, Aviemore (UK), 23.5.–27.5.2011.
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- 96 (P) **Serafin, S.** and D. Zardi (2010): Structure of the atmospheric boundary layer in the vicinity of a developing upslope flow system: A numerical model study. *14th Conference on Mountain Meteorology*, Lake Tahoe (USA), 30.8.–3.9.2010.
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## E National conference contributions (Italy and Austria)

Awarded conference contributions: 117–Best poster award, ex aequo, to Lukas Strauss; 118–Best poster award, ex aequo, to Andrea Bergner.

- 111 (T) Schneider, F. M., F. Fuchs, P. Kolinsky, E. Caffagni, M. Dorninger, **S. Serafin**, and G. Bokelmann (2018): Seismo-acoustic signals of the Baumgarten (Austria) gas explosion detected by the AlpArray seismic network. *PANGEO Austria 2018*, Vienna (A), 24.9.-26.9.2018
- 112 (P) Giovannini L., L. Laiti, **S. Serafin**, D. Zardi (2018): The thermally driven diurnal wind system of the Adige Valley in the Italian Alps. *1° Congresso Nazionale dell'Associazione Italiana di Scienze dell'Atmosfera e Meteorologia*, Bologna (I), 10-13.9.2018
- 113 (P) Rotach, M.W., M. Arpagaus, J. Cuxart, S.F.J. De Wekker, V. Grubišić, N. Kalthoff, D.J. Kirshbaum, M. Lehner, S.D. Mobbs, A. Paci, E. Palazzi, **S. Serafin**, D. Zardi (2018): Introducing TEAMx: “Multi-scale transport and exchange processes in the atmosphere over mountains – Programme and experiment”. *1° Congresso Nazionale dell'Associazione Italiana di Scienze dell'Atmosfera e Meteorologia*, Bologna (I), 10-13.9.2018
- 114 (T) Schneider, F. M., F. Fuchs, P. Kolinsky, E. Caffagni, M. Dorninger, S. Serafin, and G. Bokelmann (2018): Seismo-acoustic signals of the Baumgarten (Austria) gas explosion detected by the AlpArray seismic network. *78. Jahrestagung der DGG*, Leoben (A), 12.2.-15.2.2018
- 115 (T) Strauss, L., **S. Serafin** and V. Grubišić (2015): Turbulenzerscheinungen in einem Tal durch Rotorbildung und Wechselwirkung zwischen Föhnsturm und Talwind. *6. Österreichischer MeteorologInnentag*, Wien (A), 5.11.-6.11.2015.
- 116 (T) Sachspurger, J., **S. Serafin** and V. Grubišić (2015): Dynamik von Leewellen an der Grenzschichtinversion. *6. Österreichischer MeteorologInnentag*, Wien (A), 5.11.-6.11.2015.
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- 122 (P) Kumer V.-M., V. Grubišić, M. Dorninger, **S. Serafin** and R. Zauner (2011): Analyse von Lidar Winddaten eines Windparks in Bruck an der Leitha. *4. Österreichischer MeteorologInnentag*, Klagenfurt (A), 3.11.–4.11.2011.
- 123 (P) **Serafin, S.**, D. Caresia, F. Panelatti and D. Zardi (2009): Valutazione numerica dei bilanci di temperatura potenziale ed energia cinetica turbolenta nelle correnti forzate termicamente in valli alpine. *Convegno “Environment Including Global Change”*, Palermo (I), 5.10.–9.10.2009.
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- 126 (P) **Serafin, S.**, and D. Zardi (2006): Flussi non locali nello strato limite atmosferico convettivo: rivisitazione dei fondamenti teorici e degli approcci modellistici. *XXX Convegno di Idraulica e Costruzioni Idrauliche*, Rome (I), 10.9.–15.9.2006.
- 127 (P) Pasetto, A., **S. Serafin** and D. Zardi (2006): Un contributo alla gestione sostenibile delle risorse idriche dalla climatologia e dalla meteorologia: il progetto INTERREG “Foralps”. *XXX Convegno di Idraulica e Costruzioni Idrauliche*, Rome (I), 10.9.–15.9.2006.

- 128 (P) de Franceschi, M., **S. Serafin**, D. Zardi, M. Aniello and M. Sitta (2004): Un evento di gelata tardiva in Valle dell'Adige: confronto tra misure sperimentali e modellazione numerica. *XXIX Convegno di Idraulica e Costruzioni Idrauliche*, Trento (I), 7.9.–10.9.2004. Proceedings, vol. II, 243-250.
- 129 (P) **Serafin, S.**, A. Bertò, A. Buzzi, R. Ferretti and D. Zardi (2004): Applicazione di tecniche di cluster analysis alla verifica di previsioni di precipitazione. *XXIX Convegno di Idraulica e Costruzioni Idrauliche*, Trento (I), 7.9.–10.9.2004. Proceedings, vol. II, 321-326.

## F Citation report

	Total number of citations	WoS	Scopus	Scholar	# in list
1	Serafin and Zardi, JAS, 2010a	47	49	63	21
2	Serafin et al., ATM, 2018	39	40	48	5
3	Serafin and Zardi, JAS, 2010b	39	40	49	22
4	Kirshbaum et al., ATM, 2018	29	32	45	6
5	Strauss et al., QJRMS, 2015	25	26	35	15
6	Serafin and Zardi, JAS, 2011	24	27	31	20
7	Giovannini et al., QJRMS, 2017	18	20	20	8
8	Sachsperger et al., FES, 2015	15	17	19	16
9	Strauss et al., JAS, 2016	14	17	25	14
10	French et al., JAS, 2015	14	14	17	17
11	Grubišić et al., JAS, 2015	12	11	14	18
12	Sachsperger et al., QJRMS, 2016	10	9	12	13
13	Zardi and Serafin, QJRMS, 2015	10	10	17	19
14	Scheffknecht et al., QJRMS, 2017	7	7	7	7
15	Sachsperger et al., QJRMS, 2017	7	9	10	10
16	Schneider et al., EPSL, 2018	6	4	8	4
17	Serafin and Ferretti, JAMC, 2007	6	7	11	23
18	Serafin et al., JAMC, 2017	5	4	5	9
19	Stiperski et al., ATM, 2017	5	5	6	11
20	Serafin et al., BLM, 2016	2	2	7	12
21	<i>Richard et al., 2002</i>	2	0	0	27
22	Serafin et al., QJRMS, 2019	1	1	0	3
23	Fuchs et al., SR 2019	0	1	0	2
24	<i>Arnold et al., 2012</i>	0	11	4	24
25	<i>Serafin and Zardi, 2005</i>	0	1	0	25
26	<i>Serafin et al., 2005</i>	0	0	0	26

### Key:

- JAS: *Journal of the Atmospheric Sciences*, JIF = 3.282 (Q2) and SJR = 2.600 (Q1).
- QJRMS: *Quarterly Journal of the Royal Meteorological Society*, JIF = 3.198 (Q2) and SJR = 2.607 (Q1).
- JAMC: *Journal of Applied Meteorology and Climatology*, JIF = 2.364 (Q2) and SJR = 1.402 (Q1).
- BLM: *Boundary-Layer Meteorology*, JIF = 3.149 (Q2) and SJR = 1.348 (Q1).
- ATM: *Atmosphere*, JIF = 2.046 (Q3) and SJR = 0.625 (Q3).
- FES: *Frontiers in Earth Science*, JIF = 2.892 (Q2 in "Geosciences, Multidisciplinary"), SJR = 1.148 (Q1 in "Earth and Planetary Sciences (miscellaneous)").
- EPSL: *Earth and Planetary Science Letters*, JIF = 4.637 (Q1 in "Geochemistry and Geophysics"), SJR = 2.884 (Q1 in "Earth and Planetary Sciences (miscellaneous)").

Values of the Clarivate Journal Impact Factor (JIF) and of the Scimago Journal Rank (SJR) refer to year 2018. Quantile indications refer to the categories "Meteorology and Atmospheric Sciences" (for JCR) and "Atmospheric Science" (for SJR), unless otherwise stated. Entries in *italics* in the citation table are not peer-reviewed.

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