DR MATTEO CAMPORESE

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QUALIFICATIONS

Italian National Scientific Qualification for Full Professorship, 2018
Italian National Scientific Qualification for Associate Professorship, 2013
Ph.D. Environmental Engineering, University of Padova, Italy, 2006
Professional Engineer Licensure, University of Padova, Italy, 2002
BE/ME ("Laurea V.O.") Environmental Engineering, University of Padova, Italy, 2001

MAJOR RESEARCH INTERESTS

- Integrated surface-subsurface hydrological modelling;
- Data assimilation for hydrological modelling;
- Use of hydrogeophysical data for inverse modelling in groundwater hydrology;
- Geochemical land subsidence in peatlands drained for agriculture.

ACADEMIC EMPLOYMENT

April 2008 – present	Assistant professor, University of Padova, Department of Civil, Environmental, and Architectural Engineering, Padova, Italy
February 2013 – January 2014	Research fellow, Monash University, Department of Civil Engineering, Clayton, Vic, Australia
November 2007 – March 2008	Research associate, University of Padova, Department of Hydraulic, Maritime, Environmental, and Geotechnical Engineering, Padova, Italy
November - December 2007	Visiting research associate, Institut National de la Recherche Scientifique, Centre Eau, Terre et Environnement (INRS-ETE), University of Quebec, Quebec City, Canada
April – September 2007	Temporary instructor in Water distribution and urban drainage systems, Faculty of Engineering, and Research assistant, Department of Hydraulic, Maritime, Environmental, and Geotechnical Engineering, University of Padova, Padova, Italy
May 2006 – April 2007	Postdoctoral researcher, Institut National de la Recherche Scientifique, Centre Eau, Terre et Environnement (INRS-ETE), University of Quebec, Quebec City, Canada

TEACHING

- Groundwater hydrology, Master of Environmental Engineering, University of Padova, Course leader, 2014 - ongoing.
- Hydraulic constructions 2, Master of Civil Engineering, University of Padova, Co-instructor, 2007 - 2016, Course leader 2017 - ongoing.
- River engineering, Master of Environmental Engineering, University of Padova, Co-instructor, 2007 - 2016.
- Water distribution and urban drainage systems, Master of Civil Engineering, University of Padova, Course leader, 2007 and 2011 - 2012.
- Hydraulic infrastructure, Master of Civil Engineering, University of Padova, Course leader, 2008 - 2010.
- Environmental hydraulic works, Bachelor of Environmental Engineering, University of Padova, Co-instructor, 2007 - 2016.

POSTGRADUATE SUPERVISION

PhD students (co-supervised)

- Ali Azarnivand (2018 – ongoing), Modelling the hydrologic response of intermittent catchments to rainfall variability, Department of Civil Engineering, Monash University, Australia.
- Véronique Bouzaglou (2015 - 2016), Calibration of hydrogeological parameters through assimilation of electrical data in contamination studies, INRS-ETE, University of Quebec, Canada.
- Marco Lora (2012 - 2015), Rainfall-triggered shallow landslides in a large-scale physical model, University of Padova, Italy.
- Francesco Zovi (2011 - 2014), Uncertainty analysis of groundwater flow and transport in natural porous media, University of Padova, Italy.
- Elena Crestani (2010 - 2013), Tracer test data assimilation for groundwater inverse modelling in heterogeneous aquifers, University of Padova, Italy.

Postdoctoral researchers

- Dr Anna Botto (2017 - ongoing), "Modelling and characterization of contaminated sites by means of hydrogeophysical data", GEOCONS project.
- Dr Anna Botto (2016 - 2017), "A new framework for catchment characterization through hydrological data assimilation and process-based modelling", University of Padova.

COMPETITIVE RESEARCH GRANTS AWARDED AS CHIEF INVESTIGATOR

- Italian Ministry of Foreign Affairs and International Cooperation, "GEOCONS – Geophysical methods for the characterization of contaminated sites", Cooperation Agreement for Science, Technology and Industry between Italy and Israel, € 99,550, 2017-2019.
- University of Padova, "A new framework for catchment characterization through hydrological data assimilation and process-based modelling", € 47,000, 2015-2017.
- University of Padova, "Interpretation of geophysical measurements by ensemble Kalman filter data assimilation techniques for the assessment of natural heterogeneous aquifer hydraulic parameters at the local scale", € 57,265, 2009-2011.

COLLABORATION AS PARTNER INVESTIGATOR IN COMPETITIVE RESEARCH GRANTS

- European Research Council, "DyNET – Dynamical river NETworks: climatic controls and biogeochemical function", ERC Consolidator Grants 2017, € 1,199,758, 2018-2023 (*Chief investigator: Prof. Gianluca Botter*).
- University of Padova with water industry partners, "SWAT – Subsurface Water quality and Agricultural Practices monitoring", Uni-impresa call 2017, € 165,000, 2018-2020 (*Chief investigator: Prof. Paolo Salandin*).
- Australian Research Council, Discovery Project "Exploring water worlds for ecohydrologic modelling of ephemeral catchments", AU$ 309,599, 2017-2020 (*Chief investigator: Dr. Edoardo Daly*).
- Australian Research Council, Linkage Project "Catchment water balance and CO_2 fluxes: A comparison between productive land uses", AU$ 186,000, 2014-2017 (*Chief investigator: Dr. Edoardo Daly*).
- Ca.Ri.Pa.Ro. Foundation, "RIVERSAFE (RIVERbank Surveillance bAsed on Fiber optic sEnsors)", Excellence Projects call 2011-2012, € 446,000, 2013-2016 (*Chief investigator: Prof. Paolo Simonini*).
- Italian Ministry of Education, University, and Research "Hydroelectric energy by osmosis in coastal areas", PRIN 2010-2011, € 840,000, 2012-2015 (*Chief investigator: Prof. Tullio Tucciarelli*).
- University of Padova, "Identification of hydraulic parameters in sedimentary aquifers at the local and catchment scales", € 40,000, 2011-2013 (*Chief investigator: Prof. Paolo Salandin*).
- University of Padova, "Geological, morphological and hydrological processes: monitoring, modelling and impact in the north-eastern Italy (GEO-RISK), € 1,396,181, 2009-2012 (*Chief investigator: Prof. Rinaldo Genevois*).
- Italian Ministry of Education, University, and Research, "Subsurface flow and transport: coping with complexity and uncertainty in naturally heterogeneous formations", approximately € 40,000, 2008-2010 (*Chief investigator: Prof. Paolo Salandin*).

CONSULTING ACTIVITIES

- University of Padova, Department of Hydraulic, Maritime, Environmental, and Geotechnical Engineering, "Study C.2.10/IV - Revision of the Venice Lagoon Morphological Plan" (in Italian), commissioned by Corila (Consortium for Coordination of Research Activities Concerning the Venice Lagoon System), Partner investigator;
- University of Padova, Department of Hydraulic, Maritime, Environmental, and Geotechnical Engineering, "Physical modelling study of the spillway, outlet, and stilling basin of the Badana dam (Alessandria, Italy)" (in Italian), commissioned by Mediterranea delle Acque S.p.A., Principal investigator;
- University of Padova, International Centre of Hydrology "Dino Tonini", "Some considerations about flood control and hydropower use of a new reservoir on the Black Drin River (Albania)", commissioned by TGK Skavica S.r.l., Partner investigator.

OTHER EMPLOYMENT

January - April 2006	Medingegneria S.r.l. (Padova, Italy), design of river embankments, collaborator.
July - December 2002	Hydrosoil S.r.l. (Padova, Italy), monitoring and designing activities for remediation of contaminated sites, collaborator.

January - May 2002	Breda ing. Mario Progettazione e Consulenza Ambientale (Padova, Italy), Provincial Plan for the Remediation of Contaminated Soils in the Trento Province, Italy, collaborator.

MAIN SKILLS

Computer

Simulation and inversion models	CATHY (CATchment HYdrology), coupled model of surface–subsurface water flow and solute transport; EPANET, hydraulic and water quality modelling of water distribution in piping systems; EPA SWMM, dynamic rainfall-runoff simulation model for runoff quantity and quality from urban areas; HEC-RAS, river analysis system developed by the U.S. Army Corps of Engineers; saturated/unsaturated flow in porous media (SAT3D/FLOW3D, finite element codes developed at the University of Padova); transport of non reactive solutes in saturated porous media (particle tracking code developed at the University of Padova); R2, forward/inverse solution for 3D or 2D current flow in a quadrilateral or triangular mesh developed at Lancaster University.
Finite Element Gridding	MeshMaker (ArgusOne).
Data assimilation and optimization	Ensemble Kalman filter, particle filter, Newtonian nudging, genetic algorithms, SCE-UA.
Programming Languages	FORTRAN (77/90), Matlab.
Operating Systems	UNIX/Linux, Windows (Microsoft), Mac (Apple).
Other Engineering Software	GSLIB (Geostatistical Software Library), LAPACK: Linear Algebra Package (Fortran 77 Routines).
Graphics	Surfer and Voxler (Golden Software), AutoCAD (AutoDesk), Photoshop (Adobe), PowerPoint (Microsoft), Gimp (GNU Image Manipulation Program).
Geographic information systems	ArcGIS (Esri), MapWindow (Idaho State University Geospatial Software Lab), QGIS (OSGeo).
Word Processors	Latex, Word (Microsoft), OpenOffice (Apache).
Spreadsheets	Excel (Microsoft), Gnumeric (GNOME Office Spreadsheet).

Languages

English (fluent, overall IELTS score = 8), French (basic), Italian (mother tongue).

PROFESSIONAL MEMBERSHIPS

2003 – present	Gruppo Italiano di Idraulica (Italian Group of Hydraulics)
2005 – present	American Geophysical Union (Hydrology section)
2012 – present	European Geosciences Union (Hydrological Sciences section)
2018 – present	International Association of Hydrogeologists

SERVICE TO THE DISCIPLINE

Workshop and Conference Organisation

- Co-chair of the session "Data assimilation", *Computational Methods in Water Resources XXII*, Saint Malo, France, 3 – 7 June 2018.
- Co-Convener of *Model Uncertainties, Parameter Estimation, and Data Assimilation in Surface and Subsurface Hydrology*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, 23 - 28 April 2017.
- Member of the scientific committee of *Computational Methods in Water Resources - CMWR 2016*, University of Toronto, Canada, 20 – 24 June 2016.
- Co-Convener of *Spatial patterns evaluation and process-physics understanding in distributed hydrologic modeling*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, 17 - 22 April 2016.
- Member of the local organizing committee of the *7th International Conference on Porous Media & Annual Meeting*, InterPore, May 18 - 21, 2015, Padova, Italy.
- Convener/Chair of *Advances in Integrated Process-Based Distributed Hydrologic Modeling*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, 12 - 17 April 2015.
- Convener/Chair of *Advances in Representation, Integration, and Coupling of Novel Processes in Hydrologic and Transdisciplinary Models*, American Geophysical Union (AGU) Fall Meeting, San Francisco, USA, 15 - 19 December 2014.
- Convener/Chair of *Advances in Integrated Process-Based Distributed Hydrologic Modeling*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, 27 April – 02 May 2014.

Proposal Reviewer

- Ministero dell'Istruzione, dell'Università e della Ricerca (Italian Ministry of Education, Universities and Research)
- Agence Nationale de la Recherche (French National Research Agency)
- Deutsche Forschungsgemeinschaft (German Research Foundation)
- Fonds Wetenschappelijk Onderzoek - Vlaanderen (Flanders Research Foundation)

Journal reviewer

- Advances in Water Resources
- Environmental Modelling & Software
- Hydrogeology Journal
- Hydrological Processes
- Hydrology and Earth System Sciences
- Hydrology Research
- Journal of Hydrology
- Remote Sensing
- Reviews of Geophysics
- Sensors
- Water
- Water Resources Research

Editorial boards

- Associate Editor of Hydrogeology Journal (Springer), 2018 - present

AWARDS

- Outstanding contribution in reviewing, Advances in Water Resources, June 2013 and July 2015.
- Crestani, E., **M. Camporese**, and P. Salandin, Saltwater intrusion in coastal aquifers: laboratory experiment and numerical interpretation, poster award in the session "Management and protection of water bodies and ecosystems", XXXV National Conference on Hydraulics and Hydraulic Engineering, Bologna, Italy, 14-16 September 2016.

INVITED PRESENTATIONS AT CONFERENCES AND SEMINARS

- **Camporese, M.,** and A. Botto, Challenges and issues of data assimilation for Richards equation-based integrated hydrological models (*Minisymposium Lecture*), SIAM Conference on Mathematical and Computational Issues in the Geosciences, Erlangen, Germany, 13 September 2017.
- **Camporese, M.,** and A. Botto, On the importance of measurement error correlations in data assimilation for integrated hydrological models (*Solicited*), European Geosciences Union General Assembly 2017, Vienna, Austria, 28 April 2017.
- **Camporese, M.,** Groundwater in the box: laboratory experiments @ the University of Padova, *Department of Civil Engineering, Monash University*, Melbourne, Australia, February 2017.
- **Camporese, M.,** Hydrological modeling of small ephemeral catchments with different land uses and impacts of vegetation patterns on their water balance, *Institut National de la Recherche Scientifique, Centre Eau Terre Environnement*, Québec, Canada, December 2016.
- **Camporese, M.,** Groundwater inverse modeling via assimilation of hydrogeophysical data: from theory to practical applications, *Institute for Bio- and Geosciences, IBG-3: Agrosphere, Forschungszentrum Juelich*, Germany, June 2014.
- **Camporese, M.,** G. Cassiani, R. Deiana, P. Salandin, and A. Binley (2013), Is fully coupled hydrogeophysical inversion really better than uncoupled? A comparison study using ensemble Kalman filter assimilation of ERT-monitored tracer test data (*Invited*), Abstract H44D-02 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- **Camporese, M.,** Using EnKF to identify the hydraulic conductivity spatial distribution from ERT time-lapse monitoring of tracer test experiments, *Department of Civil Engineering, Monash University*, Melbourne, Australia, October 2012.
- **Camporese, M.,** An ensemble Kalman filter approach to identify the hydraulic conductivity spatial distribution from ERT time-lapse monitoring of three-dimensional tracer test experiments, *Laboratoire d'Hydrologie et de Géochimie de Strasbourg, Université de Strasbourg*, Strasbourg, France, June 2012.
- Putti M., **Camporese M.,** and D. Pasetto (2010). Ensemble Kalman Filter vs Particle Filter in a Physically Based Coupled Model of Surface-Subsurface Flow (*Invited*), Abstract H23H-02 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

LIST OF PUBLICATIONS

Book Chapters

1. **Camporese M.**, Gambolati G., Putti M., and Teatini P. (2006). Peatland subsidence in the Venice watershed. In: Martini I.P., Martínez Cortizas A., Chesworth W. (eds). *Peatlands evolution and records of environmental and climate changes*. pp. 529-550, Amsterdam: Elsevier, ISBN/ISSN: 0 444 52883 0.

Refereed Journals (Google scholar h-index as of 17 April 2018: 14, times cited: 784)

2. Bouzaglou, V., E. Crestani, P. Salandin, E. Gloaguen, **M. Camporese** (2018), Ensemble Kalman filter assimilation of ERT data for numerical modeling of seawater intrusion in a laboratory experiment, *Water*, 10(4), 397; doi:10.3390/w10040397.
3. Schenato, L., L. Palmieri, **M. Camporese**, S. Bersan, S. Cola, A. Pasuto, A. Galtarossa, P. Salandin, P. Simonini (2017), Distributed optical fibre sensing for early detection of shallow landslides triggering, *Scientific Reports*, 7: 14686, doi: 10.1038/s41598-017-12610-1.
4. Zovi, F., **M. Camporese**, H.-J. Hendricks Franssen, J. A. Huisman, P. Salandin (2017), Identification of high-permeability subsurface structures with multiple point geostatistics and normal score ensemble Kalman filter, *Journal of Hydrology*, 548, 208-224, doi:10.1016/j.jhydrol.2017.02.056.
5. Dean, J. F., **M. Camporese**, J. A. Webb, S. P. Grover, P. E. Dresel, and E. Daly (2016), Water balance complexities in ephemeral catchments with different land uses: Insights from monitoring and distributed hydrologic modeling, *Water Resources Research*, 52, 4713–4729, doi:10.1002/2016WR018663.
6. Fatichi, S., Vivoni, E.R., Ogden, F.L., Ivanov, V.Y., Mirus, B., Gochis, D., Downer, C.W., **Camporese, M.,** Davison, J.H., Ebel, B., Jones, N., Kim, J., Mascaro, G., Niswonger, R., Restrepo, P., Rigon, R., Shen, C., Sulis, M., Tarboton, D. (2016) An overview of current applications, challenges, and future trends in distributed process-based models in hydrology, *Journal of Hydrology*, 537, 45-60, doi:10.1016/j.jhydrol. 2016.03.026.
7. Lora, M., **M. Camporese**, P.A. Troch, and P. Salandin (2016) Rainfall-triggered shallow landslides: infiltration dynamics in a physical hillslope model, *Hydrological Processes*, 30: 3239–3251, doi: 10.1002/hyp.10829.
8. Lora, M., **M. Camporese**, P. Salandin (2016) Design and performance of a nozzle-type rainfall simulator for landslide triggering experiments, *Catena*, 140, 77-89, doi:10.1016/j.catena.2016.01.018.
9. Crestani, E., **M. Camporese**, and P. Salandin (2015), Assessment of hydraulic conductivity distributions through assimilation of travel time data from ERT-monitored tracer tests, *Advances in Water Resources*, 84, 23-36, doi:10.1016/j.advwatres.2015.07.022.
10. **Camporese, M**., Daly, E. and Paniconi, C. (2015), Catchment-scale Richards equation-based modeling of evapotranspiration via boundary condition switching and root water uptake schemes. *Water Resources Research*, 51, 5756–5771, doi:10.1002/2015WR017139.
11. Lora, M., **M. Camporese**, and P. Salandin (2015), Calibration of Water Content Reflectometer Sensors with a Large Soil Sample, *Vadose Zone Journal*, 15, doi:10.2136/vzj2015.03.0039.
12. **Camporese, M.**, G. Cassiani, R. Deiana, P. Salandin, and A. Binley (2015), Coupled and uncoupled hydrogeophysical inversions using ensemble Kalman filter assimilation of

ERT-monitored tracer test data, *Water Resources Research*, 51, 3277–3291, doi:10.1002/2014WR016017.

13. **Camporese, M.,** E. Daly, P.E. Dresel, and J. Webb (2014), Simplified modeling of catchment-scale evapotranspiration via boundary condition switching, *Advances in Water Resources*, 69, 95-105, doi: 10.1016/j.advwatres.2014.04.008.

14. **Camporese, M.,** D. Penna, M. Borga, and C. Paniconi (2014), A field and modeling study of nonlinear storage-discharge dynamics for an Alpine headwater catchment, *Water Resources Research*, 50, doi: 10.1002/2013WR013604.

15. **Camporese, M.** (2014). Closure to "Optimal Design of Horizontally Framed Miter Gates" by Matteo Camporese, *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 140(5), doi: 10.1061/(ASCE)WW.1943-5460.0000277.

16. **Camporese, M.** (2013). Optimal Design of Horizontally Framed Miter Gates, *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 139(6), 543–547, doi: 10.1061/(ASCE)WW.1943-5460.0000205.

17. Crestani E., **M. Camporese**, D. Baù, and P. Salandin (2013). Ensemble Kalman Filter Versus Ensemble Smoother for Assessing Hydraulic Conductivity via Tracer Test Data Assimilation, *Hydrology and Earth System Sciences*, 17(4), 1517-1531, doi: 10.5194/hess-17-1517-2013.

18. Pasetto, D., **M. Camporese**, and M. Putti (2012). Ensemble Kalman filter versus particle filter for a physically-based coupled surface-subsurface model, *Advances in Water Resources*, 47, 1-13, doi:10.1016/j.advwatres.2012.06.009.

19. **Camporese M.,** G. Cassiani, R. Deiana, and P. Salandin (2011). Assessment of local hydraulic properties from electrical resistivity tomography monitoring of a three-dimensional synthetic tracer test experiment, *Water Resources Research*, 47, W12508, doi:10.1029/2011WR010528.

20. Sulis M., C. Paniconi, and **M. Camporese** (2011). Impact of grid resolution on the integrated and distributed response of a coupled surface–subsurface hydrological model for the des Anglais catchment, Quebec, *Hydrological Processes*, vol. 25(12), pp. 1853-1865, doi: 10.1002/hyp.7941.

21. **Camporese M.,** C. Paniconi, M. Putti, and S. Orlandini (2010). Surface–subsurface flow modeling with path-based runoff routing, boundary condition-based coupling, and assimilation of multisource observation data. *Water Resources Research*, vol. 46, W02512, doi: 10.1029/2008WR007536.

22. **Camporese M.,** C. Paniconi, M. Putti, and P. Salandin (2009). Ensemble Kalman Filter Data Assimilation for a Process-based Catchment Scale Model of Surface and Subsurface Flow. *Water Resources Research*, vol. 45, W10421, doi: 10.1029/2008WR007031.

23. **Camporese M.,** C. Paniconi, M. Putti, and P. Salandin (2009). Comparison of data assimilation techniques for a coupled model of surface and subsurface flow. *Vadose Zone Journal*, vol. 8, pp. 837-845, doi: 10.2136/vzj2009.0018.

24. Gauthier M.J., **Camporese M.,** C. Rivard, C. Paniconi, and M. Larocque (2009). A modeling study of heterogeneity and surface water-groundwater interactions in the Thomas Brook catchment, Annapolis Valley (Nova Scotia, Canada). *Hydrology and Earth System Sciences*, vol. 13, pp. 1583-1596.

25. **Camporese M.,** M. Putti, P. Salandin, and P. Teatini (2008). Spatial variability of CO_2 efflux in a drained cropped peatland south of Venice, Italy. *Journal of Geophysical Research: Biogeosciences*, vol. 113, G04018, doi: 10.1029/2008JG000786.

26. **Camporese M.**, S. Ferraris, M. Putti, P. Salandin, and P. Teatini (2006). Hydrological modeling in swelling/shrinking peat soils. *Water Resources Research*, vol. 42, p. W06420, doi: 10.1029/2005WR004495.

27. Gambolati G., M. Putti, P. Teatini, **Camporese M.**, S. Ferraris, G. Gasparetto Stori, V. Nicoletti, S. Silvestri, F. Rizzetto, and L. Tosi (2005). Peat Land Oxidation Enhances Subsidence in the Venice Watershed. *Eos Trans. AGU*, vol. 86(23), pp. 217-220.

Peer-reviewed Conference Papers

28. L. Schenato, **M. Camporese**, S. Bersan, S. Cola, A. Galtarossa, et al. (2017). High density distributed strain sensing of landslide in large scale physical model, Proc. *SPIE 10323, 25th International Conference on Optical Fiber Sensors*, 1032364 (April 23, 2017); doi:10.1117/12.2263284.

29. **Camporese, M.**, J. F. Dean, P. E. Dresel, J. Webb, and E. Daly (2013). Hydrological modelling of paired catchments with competing land uses, Proceedings of the *20th International Congress on Modelling and Simulation (MODSIM 2013)*, 1-6 December 2013 Adelaide, Australia.

30. **Camporese M.**, E. Crestani, and P. Salandin (2012). Assessment of local hydraulic parameters by EnKF data assimilation in real aquifers: a case study in downtown Padova (Italy), *XIX International Conference on Computational Methods in Water Resources CMWR 2012*, University of Illinois at Urbana-Champaign, June 17-22, 2012.

31. **Camporese M.**, G. Cassiani, R. Deiana, P. Salandin (2011). Electrical resistivity tomography time-lapse monitoring of three-dimensional synthetic tracer test experiments: an Ensemble Kalman Filter approach to identify the hydraulic conductivity spatial distribution. In: *EAGE/SEG Research Workshop 2011, Towards a Full Integration from Geosciences to Reservoir Simulation*. Trieste, 1-2 September 2011.

32. Crestani E., **M. Camporese**, and P. Salandin (2010). Hydraulic conductivity assessment via tracer test data assimilation: A comparison of updating techniques. In: Proceedings of the *IAHR International Groundwater Symposium 2010*, Valencia, Spain, September 22-24, 2010.

33. **Camporese M.**, L. Da Deppo, P. Salandin, and P. Pizzaia (2010). Reducing modeling uncertainty in natural aquifers: the experimental site of Settolo (Italy). In: J. Carrera (Ed), Proceedings of the *XVIII Conference on Computational Methods in Water Resources (CMWR 2010)*. Barcelona, June 21-24, 2010.

34. Sulis M., C. Paniconi, and **M. Camporese** (2010). Influence of spatial resolution on the distributed surface routing response of the des Anglais river basin (Canada). In: J. Carrera (Ed), Proceedings of the *XVIII Conference on Computational Methods in Water Resources (CMWR 2010)*. Barcelona, June 21-24, 2010.

35. **Camporese M.**, C. Paniconi, M. Putti, P. Salandin, P. Teatini (2006). Two dimensional hydrological simulation in elastic swelling/shrinking peat soils. In: *XVI International Conference on Computational Methods in Water Resources*. Copenhagen, Denmark, 18-22 June 2006, doi: 10.4122/1.1000000597.

36. **Camporese M.**, Gambolati G., Putti M., Teatini P., Bonardi M., Rizzetto F., Tosi L., Ferraris S., Gasparetto Stori G., Nicoletti V., Silvestri S., Salandin P. (2005). Monitoring and modeling peat soil subsidence in the Venice Lagoon. In: A. Zhang et al. (Eds). *Land Subsidence (Proc. 7th Int. Symp. on Land Subsidence)*. vol. II, p. 543-551, Shanghai Scientific & Technical, Shanghai.

37. **Camporese M.**, Putti M., P. Salandin, P. Teatini (2004). Modeling peatland hydrology and related elastic deformation . In: C.T. Miller, M.W. Farthing, W.G. Gray, and G.F.

Pinder (Eds). *Proceedings of the 15th International Conference on Computational Methods in Water Resources*. Chapel Hill, North Carolina, June 13–17 2004, vol. 2, p. 1453-1464, Elsevier Science, Amsterdam.

38. **Camporese M.**, Putti M., Salandin P., Teatini P. (2004). Finite element model of swelling/shrinkage and hydrology in a peatland south of Venice. In: J. Paivanen (Ed). *Wise Use of Peatlands*. Tampere, Finland, June 2004, vol. 1, p. 263-269, International Peat Society, Jyväskylä.

39. **Camporese M.**, Putti M., Salandin P., Teatini P. (2004). Spatial and temporal variability of CO_2 flux from a peatland south of Venice. In: J. Paivanen (Ed). *Wise Use of Peatlands*. Tampere, Finland, June 2004, vol. 1, p. 117-123, International Peat Society, Jyväskylä.

40. Teatini P., Putti M., Gambolati G., Ferraris S., **Camporese M.** (2004). Reversible/irreversible peat surface displacements and hydrological regime in the Zennare Basin, Venice. In: P. Campostrini (Ed). *Scientific Research and Safeguarding of Venice Research Programme 2001-2003*. Venice, 31 March - 2 April 2003, vol. II, p. 93-106, Corila, Venice.

Other Presentations (oral or poster) at Conferences and Seminars

- **Camporese, M.**, and A. Botto (2017), Multisource data assimilation in a Richards equation-based integrated hydrological model: a real-world application to an experimental hillslope, Abstract H54C-05 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.

- Bertoldi, G., E. Bortoli, G. Wohlfahrt, and **M. Camporese** (2017), Modeling alpine grasslands with two integrated hydrologic models: a comparison of the different process representation in CATHY and GEOtop, Abstract H51F-1343 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.

- Racine, C., S. J. Gumiere, C. Paniconi, C. Dupuis, J. Lafond, C. Scudeler, **M. Camporese** (2017). Forecast model for a water table control system in cranberry production, Geophysical Research Abstracts, Vol. 19, EGU2017-19612, EGU General Assembly 2017.

- Bouzaglou, V., **M. Camporese**, E. Gloaguen, E. Crestani, P. Salandin (2016). Ensemble Kalman filter assimilation of ERT data for the numerical interpretation of a saltwater intrusion laboratory experiment, Workshop on Data Assimilation in Terrestrial Systems, 19th-21st September 2016, University of Bonn, Germany.

- **Camporese, M.**, J. F. Dean, E. Daly (2016). Hydrological modeling of ephemeral catchments with different land uses, Computational Methods in Water Resources 2016, 20th – 24th June 2016, University of Toronto, Canada.

- **Camporese, M.**, J. F. Dean, E. Daly (2016). Lessons learned from integrated hydrological modeling of ephemeral catchments with different land uses, Geophysical Research Abstracts Vol. 18, EGU2016-13483, EGU General Assembly 2016.

- Crestani E., **M. Camporese**, P. Salandin (2015). Assessment of local-scale hydraulic conductivity via assimilation of travel time data from ERT-monitored tracer tests. AQUA 2015, 42nd IAH Congress, the International Association of Hydrogeologists, Hydrogeology: Back to the Future! Rome, 13-18 September 2015.

- **Camporese, M.**, G. Cassiani, R. Deiana, P. Salandin, and A. Binley (2015). Comparing coupled and uncoupled hydrogeophysical inversions using ensemble kalman filter assimilation of ERT-monitored tracer test data. AQUA 2015, 42nd IAH Congress, the

International Association of Hydrogeologists, Hydrogeology: Back to the Future! Rome, 13-18 September 2015.

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