



Roberto Revelli Curriculum Vitae

Name

Roberto Revelli

Contact

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Professional positions

31/12/2018-now	Full Professor at Politecnico di Torino (Polito)
01/2005-12/2018	Associate Professor at Polito
11/1999-12/2004	Researcher at Polito
09/1997-10/1999	Fellowship researcher. Post PH.D. program on the topic "Transport phenomena in heterogeneous media"

Education

02/1994-08/1997	PH.D. on Hydraulics. (University of Florence) Dissertation title: River-aquifer interaction and effects on pollutant transport. Advisor: Sebastiano Sordo
02/1993-02/1994	Military Service
09/1987-02/1993	Master degree in Civil Engineering (Hydraulics) at Polito. Dissertation title "On the incomplete self-similarity law for the velocity distribution in turbulent uniform flow". Advisors: Sebastiano Sordo and Luigi Butera

Professional experiences

08/2016-11/2018	Marie Skłodowska-Curie Fellow (Duke University and Polito)
11/2017-11/2018	Visiting Associate Professor at Department of Environment, Land and Infrastructure Engineering (DIATI) – Polito (Return phase of the Marie Skłodowska-Curie grant agreement "ECO.G.U.S" H2020 #701914)



- 07/2016-11/2017 Visiting Associate Professor at Pratt School of Engineering – Duke University (Outgoing phase of the Marie Sklodowska-Curie grant agreement "ECO.G.U.S" H2020 #701914)
- 05/2015-06/2015 Visiting Scholar at Pratt School of Engineering – Duke University
- 01/2012-09/2015 Vice Director of the DIATI – Polito

Boards/Committees

Term membership on the Graduate Faculty – Duke University – Pratt School of Engineering

Auditor for MIUR

Scientific Committee of Hydroaid: Management of Water Resources Institutes

Board for the Management of the DIATI

Board for the Management of Master Degree Course in: Civil Engineering for Water Management (Polito)

Board for the Management of Master Degree Course in Civil Engineering (Polito)

Board for the Management of Master Degree Course in Environmental Engineering (Polito)

Board for the Management of Master Degree Course in Green Areas and Landscape Design (Polito/Politecnico di Milano/University of Genova)

Academic Board of the PhD in Civil and Environmental Engineering (Polito)

Academic Board of the PhD in Environmental Engineering (Polito)

Academic Board of the PhD in Water Engineering (Polito)

Academic Board of the PhD in Engineering for natural and built environment (Polito)

Academic Board of the PhD in Water and territory management engineering (Polito)

Scientific Committee for the Piedmont Section of the Italian Hydrotechnical Association

National Group for Mathematical Physics.

XXXVII National Congress of Hydraulics, Reggio Calabria (Italy), 2020

XXXIV National Congress of Hydraulics, Bari (Italy), 2014

ORME – Water wheels and hydroelectric production", Polito, 2014

CCWI 2013, Computing and Control for Water Industry – Information for Water Systems and Smart Cities, 12th CCWI International Conference, Perugia (Italy), 2013

World Water Day ONU 47/193, Polito, 2010

Water Knowledge - Racconigi Royal Park as source of knowledge between history and modernity, Racconigi (Italy), 2006

Board for the predisposition and control of the call and the results of the competitive bid for the preliminary project of a multiuse reservoir system (Piedmont Region and Consorzio Irrigazione del Pesio)

Advisor for the Court of Accounts (Corte dei Conti), Piemonte Section.



Advisor and expert member for the Piedmont Region, Provincia di Torino, CNR, Comunità Montana Valli Chisone e Germanasca for projects selection.

Expert member of the Extraction Activity Commission for the Cuneo Provincial Administration.

Academic honors and awards

IFIT 2018 – Second International Conference of IFToMM ITALY (29-30 November 2018, Cassino, Italy)
Silver Best Application Paper Award for the paper “Franco W., Ferraresi C., Revelli R. (2019) Power transmission and mechanisms of an old water mill, *Mechanisms and Machine Science*, 68, 29-37, doi: 10.1007/978-3-030-03320-0_4”

Highly Cited Papers (WoS): Boano F., Harvey J.W., Marion A., Packman A.I., Revelli R., Ridolfi L., Wörman A. (2014) Hyporheic flow and transport processes: Mechanisms, models, and biogeochemical implications, *Reviews of Geophysics*, 52(4), 603-679, doi:10.1002/2012RG000417

2010 Special Prize (GII): "Hydraulics and Historical Gardens Restoration: the water games in the Racconigi Royal Park" by Cavagnero P., Revelli R. and Sordo S.

Italian National Scientific Qualifications awarded for Full Professor positions – ASN 2012 – 08/A1 Hydraulics, Hydrology, Hydraulic and Marine Constructions

Editorial

Cogent Engineering - Taylor & Francis Group

FREIJ: Forestry Research and Engineering: International Journal - MedCrave

Ukrainian Academic Science of Kiev

Reviewer international journals (e.g. *Advances in Water Resources*, *Environmental Modeling and Assessment*, *Environmental Science and Pollution Research*, *Geophysical Research Letters*, *Hydrological Processes*, *Hydrology and Earth System Science*, *International Journal for Numerical Methods in Fluids*, *International Journal of Heat and Mass Transfer*, *Journal of Fluid Mechanics*, *Journal of Hydroinformatics*, *Journal of Hydrology*, *Journal of Irrigation and Drainage Engineering – ASCE*), *Journal of Zhejiang University-SCIENCE A*, *Water Resources Research*, etc...)

Invited speaker

“Eco.G.U.s. - ECOsystem services for resilient and sustainable cities: an ecohydrological approach for Green Urban Spaces”, NoonTalk #27, DIATI, Polito, November 11th, 2018

“The Flow of Ideas: Leonardo and Water”, Centre for Medieval and Renaissance Studies, UCLA, Los Angeles, May 20th – 21st, 2016

“MiniHydro: resource for territory”, ARS.UNI.VCO, Verbania, 2013

“Ecohydrology and Sustainability in Seasonally Dry Ecosystems”, Pratt School of Engineering, Duke University, June 13th – 14th, 2011

“Problems and Hydraulic Solutions in Historic Gardens”, III Festival on Biodiversity, Historical Documentation Centre, REGIS Historical Garden Network, Cinisello Balsamo, 2009

“Architectonic Literature (Centuries XV-XVIII): Illustrations, Language, Translations, Critical Editions”, CISUR – International Centre of Humanistic and Renaissance Studies, Penne (Italy), May 12th, 2008



Teaching activities

2019: Environmental Hydraulics ((Polito - Civil Engineering)

2019: Hydraulics (Polito - Civil Engineering, Environmental Engineering)

2018: Environmental Hydraulics ((Polito - Civil Engineering)

2018: Hydraulics (Polito - Civil Engineering, Environmental Engineering)

2016: River Hydraulics ((Polito - Civil Engineering)

2016: Hydraulics (Polito - Civil Engineering, Environmental Engineering)

2015: Water basin Management (Polito – Master Water Engineering for Drinking and Industrial Use)

2015: River Hydraulics ((Polito - Civil Engineering)

2015: IUWM Integrated Urban Water Management (Polito – Master Water Engineering for Drinking and Industrial Use)

2015: Hydraulics (Polito - Civil Engineering, Environmental Engineering)

2014: Transport processes in rivers (Polito Doctorate School - Environmental Engineering)

2014: River Hydraulics ((Polito - Civil Engineering)

2014: Hydraulics (Polito - Civil Engineering, Environmental Engineering)

2013: River Hydraulics ((Polito - Civil Engineering)

2013: Hydraulics (Polito - Civil Engineering, Environmental Engineering)

2012: Water engineering for historical garden (Polito - Green Areas and Landscape Design)

2012: River Hydraulics ((Polito - Civil Engineering)

2012: Hydrology I (Polito - Civil Engineering in Water Management)

2012: Hydraulics (Polito - Civil Engineering, Environmental Engineering)

2011: River Hydraulics (Polito - Civil Engineering in Water Management)

2011: Landscape Water System- (Polito - Gardens, Parks and Landscape Design)

2011: Hydrology I (Polito - Civil Engineering in Water Management)

2011: Hydraulics (Polito - Civil Engineering)

2011: Hydraulics (On line course) (Polito - Civil Engineering)

2010: River Hydraulics(Polito - Civil Engineering in Water Management)

2010: Landscape Water System (Polito - Gardens, Parks and Landscape Design)

2010: Hydrology I (Polito - Civil Engineering in Water Management)

2010: Hydraulics (Polito - Civil Engineering)

2010: Hydraulics (On line course) (Polito - Civil Engineering)

2009: River Hydraulics (Polito - Civil Engineering in Water Management)



- 2009: Landscape Water System (Polito - Gardens, Parks and Landscape Design)
- 2009: Hydrology I (Polito - Civil Engineering in Water Management)
- 2009: Hydraulics (Polito - Civil Engineering)
- 2009: Hydraulics (On line course) (Polito - Civil Engineering)
- 2008: River Hydraulics (Polito - Civil Engineering in Water Management)
- 2008: Landscape Water System (Polito - Gardens, Parks and Landscape Design)
- 2008: Hydrology I (Polito - Civil Engineering in Water Management)
- 2008: Hydraulics Works (Polito - Civil Engineering)
- 2008: Hydraulics (Telematic University Uninettuno, Rome - Civil Engineering)
- 2008: Hydraulics (On line course) (Polito - Civil Engineering)
- 2007: River Hydraulics (Polito - Civil Engineering in Water Management)
- 2007: Landscape Water System (Polito - Gardens, Parks and Landscape Design)
- 2007: Hydrology PRLP (Polito - Civil Engineering in Water Management)
- 2007: Hydraulics Works (Polito - Civil Engineering)
- 2007: Hydraulics (Telematic University Uninettuno, Rome - Civil Engineering)
- 2007: Fluid Mechanics (Polito - Automotive Engineering)
- 2006: River Hydraulics (Polito - Civil Engineering in Water Management)
- 2006: Principles of Hydraulics (Hydroaid)
- 2006: Landscape Water System (Polito - Gardens, Parks and Landscape Design)
- 2006: Hydraulics Works (Polito - Civil Engineering)
- 2006: Fluid Mechanics (Polito - Automotive Engineering)
- 2006: Collection of surface water (Hydroaid)
- 2005: River Hydraulics (Polito - Civil Engineering in Water Management)
- 2005: Principles of Hydraulics (Hydroaid)
- 2005: Landscape Water System (Polito - Gardens, Parks and Landscape Design)
- 2005: Hydrology PRLP (Polito - Civil Engineering in Water Management)
- 2005: Fluid Mechanics (Polito - Automotive Engineering)
- 2004: Principles of Hydraulics (Hydroaid)
- 2004: Hydrology PRLP (Polito - Civil Engineering in Water Management)
- 2004: Fluid Mechanics (Polito - Automotive Engineering)
- 2003: Hydrodynamic, chemical and biological transport phenomena in natural streams (Polito Doctorate School - Environmental Engineering)
- 2003: Hydraulics Works (Polito - Civil Engineering in Water Management)



- 2003: Hydraulics (Polito - Architectural Engineering)
- 2003: Fluid Mechanics (Polito - Automotive Engineering)
- 2002: Fluid Mechanics (Polito - Automotive Engineering)
- 2002: Hydraulics Constructions (ass.) (Polito - Civil Engineering)
- 2001: Hydrological Controls and Measurements (Polito - Environmental Engineering)
- 2001: Fluid Mechanics (Polito - Mechanical Engineering)
- 2001: Hydraulics Constructions (ass.) (Polito - Civil Engineering)
- 2000: Hydrological Controls and Measurements (Polito - Environmental Engineering)
- 2000: Fluid Mechanics (Polito - Mechanical Engineering)
- 2000: Hydraulics Constructions (ass.) (Polito - Civil Engineering)
- 1999: Hydrological Controls and Measurements (Polito - Environmental Engineering)
- 1999: Fluid Mechanics (Polito - Mechanical Engineering)
- 1999: Environmental Hydraulics (ass.) (Polito - Environmental Engineering)
- 1998: Hydrological Controls and Measurements (Polito - Environmental Engineering)
- 1998: Fluid Mechanics (Polito - Mechanical Engineering)
- 1997: Fluid Mechanics (Polito - Mechanical Engineering)
- 1996: Fluid Mechanics (ass.) (Polito - Mechanical Engineering)
- 1995: Fluid Mechanics (ass.) (Polito - Mechanical Engineering)

Teaching activities (coordination)

- 2015: Technical course on water supply systems, (e-learning) (HydroAid)
- 2015: II Level Specializing Master Program “Water Engineering for Drinking and Industrial Use”, IV edition (Polito)
- 2014: Water Management Planning (HydroAid - Watsam - Torino)
- 2014: IUWM: Integrated Urban Water Management (HydroAid - Watsam - Ethiopia)
- 2014: II Level Specializing Master Program “Water Engineering for Drinking and Industrial Use”, III edition (Polito)
- 2013: II Level Specializing Master Program “Water Engineering for Drinking and Industrial Use”, II edition (Polito)
- 2008: Training Course on management of water resources (HydroAid)
- 2008: Supply system for drinking water, irrigation and sanitation (HydroAid)
- 2007: Drinking water supply system (HydroAid)

Other Teaching activities

- Epanet in IUWM contest: the Watsam project as a support to Arba Minch (Ethiopia) water utilities management, Undergraduate Course CEE 463L - Water Resources Engineering, Duke University
- Water wheels and hydropower production for cultural heritage valorization, CREDA Onlus, Monza (It)



Water wheels and minihydro, Univer, Borgosesia (It)

Energy from water: how a drop can turn on a lamp, EnvironSchool, Lessons for High School Students

Professional responsibility and ethics: risk management in flooded areas, College of Architects, Imperia (It)

Advisoring

More than 200 Bachelor's and Master of Science's degree thesis

More than 30 apprenticeship programs

PhD students: Boano Fulvio (2006) "Solute transport in rivers and hyporheic zones", Cotto Ilenia (2007) "Water harvesting in developing countries", Demaria Andrea (NC) Solute transport in rivers, Gossa Paolo (NC) Water and agriculture, Borra Stefania (NC) Hyporheic process, Cavagnero Paolo (2010) "Dialogue between Hydraulics, History and Architecture: the restoration of historical gardens and Leonardo experiments", Bardini Laura (2013) "Impact of hyporheic zones on nutrient dynamics", Scibetta Marco (2013) "Novel approaches for water network management", Rizzo Anacleto (2014) "Modelling human-made wetlands for a sustainable development", Quaranta Emanuele (2017) "Investigation and optimization of the performance of gravity water wheel", Busca Francesco (2019, PhD in progress) "Ecosystem services quantification in urban green spaces"

Post-Doc students: Bardini Laura – Biogeochemical processes in rivers; Boano Fulvio – Hyporheic processes; Cavagnero Paolo – Environmental impacts of small hydropower generator; Kudryavtseva Morse Nataliya – Renewable energy production (hydroelectric and marine energy) – Grant Scientific Responsible; Quaranta Emanuele – Renewable energy production from water wheels and pico-hydropower generators, Scibetta Marco – Advances in water network management; Vidali Cristina – Water wheels and renewable energy production;

Erasmus Project "Expert program of Erasmus-Mundus", prof. Ramesh Kumar Maskey, University of Kathmandu, Nepal.

Research interests:

Fluid mechanics, water network management, ecohydraulics and renewable energy

Ecohydrology and ecosystem services

Fluid mechanics and transport processes in streams Hyporheic flow and exchange processes, biogeochemical behavior of nutrients in natural and built systems

Historic hydraulics

Peer-reviewed papers

Butera, I., Fontan, S., Poggi, D., Quaranta, E., Revelli, R. (2020) Experimental Analysis of Effect of Canal Geometry and Water Levels on Rotary Hydrostatic Pressure Machine, *Journal of Hydraulic Engineering*, 146 (3), art. no. 04019071, doi: 10.1061/(ASCE)HY.1943-7900.0001690

Franco, W., Ferraresi, C., Revelli, R. (2019) Functional analysis of piedmont (Italy) ancient water mills aimed at their recovery or reconversion, *Machines*, 7 (2), art. no. 32, doi: 10.3390/machines7020032



- Quaranta E., Revelli R. (2018) Gravity water wheels as a micro hydropower energy source: A review based on historic data, design methods, efficiencies and modern optimizations, *Renewable and Sustainable Energy Reviews*, 97, 414-427, doi: 10.1016/j.rser.2018.08.033
- Rizzo A., Bresciani R., Masi F., Boano F., Revelli R. and Ridolfi L. (2018) Flood reduction as an ecosystem service of constructed wetlands for combined sewer overflow, *Journal of Hydrology*, 560, 150-159, doi: 10.1016/j.jhydrol.2018.03.020
- Revelli R., Porporato A. (2018) Ecohydrological model for the quantification of ecosystem services provided by urban street trees, *Urban Ecosystem*, 21(3), 489-504, doi:10.1007/s11252-018-0741-2
- Boano F., Rizzo A., Samsó R., García J., Revelli R., Ridolfi L. (2018) Changes in bacteria composition and efficiency of constructed wetlands under sustained overloads: a modeling experiment, *Science of The Total Environment*, 612, 1480-1487, doi:10.1016/j.scitotenv.2017.08.265
- Pelak N., Revelli R., Porporato A. (2017) A dynamical systems framework for crop models: Toward optimal fertilization and irrigation strategies under climatic variability, *Ecological Modelling*, 365, 80-92, doi:10.1016/j.ecolmodel.2017.10.003
- Quaranta E., Revelli R. (2017) CFD simulations to optimize the blades design of water wheels, *Drinking Water Engineering and Science*, 10(1), 27-32, doi:10.5194/dwes-10-27-2017
- Revelli R. (2017) Urban Forests, Ecosystem Services and Modeling, *Forestry Research and Engineering: International Journal*, 1(2), doi:10.15406/freij.2017.01.00009
- Banzato C., Butera I., Revelli R., Vigna B. (2017) Reliability of the VESPA index in identifying spring vulnerability level, *Journal of Hydrologic Engineering*, 22(6), 04017008, doi:10.1061/(ASCE)HE.1943-5584.0001498
- Quaranta E., Katopodis C., Revelli R., Comoglio C. (2017) Turbulent flow field comparison and related suitability for fish passage of a standard and a simplified low gradient vertical slot fishway, *River Research and Applications*, 33, 1295–1305, doi:10.1002/rra.3193
- Quaranta E., Revelli R. (2016) Hydraulic behavior and performance of breastshot water wheels for different numbers of blades, *Journal of Hydraulic Engineering*, 143(1), 04016072, doi:10.1061/(ASCE)HY.1943-7900.0001229
- Vidali C., Fontan S., Quaranta E., Cavagnero P., Revelli R. (2016) Experimental and dimensional analysis of a breastshot water wheel, *Journal of Hydraulic Research*, 54(4), 473-479, doi:10.1080/00221686.2016.1147499
- Boano F., Fiore S., Revelli R. (2016) Chlorate formation in water distribution systems: A modeling study, *Journal of Hydroinformatics*, 18(1), 115-125, doi:10.2166/hydro.2015.079
- Quaranta E., Revelli R. (2016) Optimization of breastshot water wheels performance using different inflow configurations. *Renewable Energy*, 97, 243-251, doi:10.1016/j.renene.2016.05.078
- Quaranta E., Revelli R. (2015) Output power and power losses estimation for an overshoot water wheel, *Renewable Energy*, 83, 979-987, doi:10.1016/j.renene.2015.05.018
- Rizzo A., Boano F., Revelli R., Ridolfi L. (2015) Groundwater impact on methane emissions from flooded paddy fields, *Advances in Water Resources*, 83, 340-350, doi:10.1016/j.advwatres.2015.07.005
- Quaranta E., Revelli R. (2015) Performance characteristics, power losses and mechanical power estimation for a breastshot water wheel, *Energy*, 87, 315-325, doi:10.1016/j.energy.2015.04.079



- 静水力学の基礎を築くまで水の重さにまつわる知的な旅:レオナルド・ダ・ヴィンチの軌跡 P. カバネロ, R. リベリ, 瀧本裕士 訳, **Parity** 2015. (Japan translation of the paper Cavagnero, P., Revelli R. (2014) The weight of water, *Physics Today*, 67 (8), 41-46, doi:10.1063/PT.3.2481)
- Boano F., Fiore S., Revelli R. (2014) Modeling the fate of disinfection by-products in water distribution systems, *Procedia Engineering*, 89(C), 255-261, doi:10.1016/j.proeng.2014.11.185
- Boano F., Harvey J.W., Marion A., Packman A.I., Revelli R., Ridolfi L., Wörman A. (2014) Hyporheic flow and transport processes: Mechanisms, models, and biogeochemical implications, *Reviews of Geophysics*, 52(4), 603-679, doi:10.1002/2012RG000417
- Cavagnero R., Revelli R., (2014) The weight of water, *Physics Today*, 67(8), 41-46, doi:10.1063/PT.3.2481
- Scibetta M., Boano F., Revelli R., Ridolfi L. (2014) Community detection as a tool for district metered areas identification, *Procedia Engineering*, 70, 1518-1523, doi:10.1016/j.proeng.2014.02.167
- Rizzo A., Langergraber G., Galvão A., Boano F., Revelli R., Ridolfi L. (2014) Modelling the response of laboratory horizontal flow constructed wetlands to unsteady organic loads with HYDRUS-CWM1, *Ecological Engineering*, 68, 209-213, doi:10.1016/j.ecoleng.2014.03.073
- Rizzo A., Boano F., Revelli R., Ridolfi L. (2014) Decreasing of methanogenic activity in paddy fields via lowering ponding water temperature: A modeling investigation, *Soil Biology and Biochemistry*, 75, 211-222, doi:10.1016/j.soilbio.2014.04.016
- Vico G., Revelli R., Porporato A. (2014) Ecohydrology of street trees: Design and irrigation requirements for sustainable water use, *Ecohydrology*, 7(2), 508-523, doi:10.1002/eco.1369
- Rizzo A., Boano F., Revelli R., Ridolfi L. (2013) Can microbial fuel cells be an effective mitigation strategy for methane emissions from paddy fields? *Ecological Engineering*, 60, 167-171, doi:10.1016/j.ecoleng.2013.07.033
- Fenoglio S., Boano F., Bo T., Revelli R., Ridolfi L. (2013) The impacts of increasing current velocity on the drift of *Simulium monticola* (Diptera: Simuliidae): a laboratory approach (2013) *Italian Journal of Zoology*, 80(3), 443-448, doi:10.1080/11250003.2013.820798
- Butera I., Boano F., Revelli R., Ridolfi L. (2013) Recovering the release history of a pollutant intrusion into a water supply system through a geostatistical approach, *Journal of Water Resources Planning and Management*, 139(4), 418-425, doi:10.1061/(ASCE)WR.1943-5452.0000267
- Scibetta M., Boano F., Revelli R., Ridolfi L. (2013) Community detection as a tool for complex pipe network clustering, *EPL Europhysics Letters*, 103(4), 48001, doi:10.1209/0295-5075/103/48001
- Revelli R. (2013) Talks with water among technology and complexity, *Archi*, 2, 52-57
- Boano F., Revelli R., Ridolfi L. (2013) Modeling hyporheic exchange with unsteady stream discharge and bedform dynamics, *Water Resources Research*, 49(7), 4089-4099, doi:10.1002/wrcr.20322
- Bardini L., Boano F., Cardenas M.B., Sawyer A.H., Revelli R., Ridolfi L. (2013) Small-scale permeability heterogeneity has negligible effects on nutrient cycling in streambeds, *Geophysical Research Letters*, 40(6), 1118-1122, doi:10.1002/grl.50224
- Rizzo A., Boano F., Revelli R., Ridolfi L. (2013) Role of water flow in modeling methane emissions from flooded paddy soils, *Advances in Water Resources*, 52, 261-274, doi:10.1016/j.advwatres.2012.11.016
- Bardini L., Boano F., Cardenas M.B., Revelli R., Ridolfi L. (2012) Nutrient cycling in bedform induced hyporheic zones, *Geochimica et Cosmochimica Acta*, 84, 47-61, doi:10.1016/j.gca.2012.01.025



- Boano F., Revelli R., Ridolfi L. (2011) Water and solute exchange through flat streambeds induced by large turbulent eddies, *Journal of Hydrology*, 402(3-4), 290-296, doi:10.1016/j.jhydrol.2011.03.023
- Revelli R., Ridolfi L. (2011) Generalized collocation method for linear and nonlinear convection-diffusion models, *KSCE Journal of Civil Engineering*, 15(3), 589-593, doi:10.1007/s12205-011-1027-x
- Boano F., Manes C., Poggi D., Revelli R., Ridolfi L. (2010) Comment on "pore water flow due to near-bed turbulence and associated solute transfer in a stream or lake sediment bed" by M. Higashino et al. (2010), *Water Resources Research*, 46(10), W10801, doi:10.1029/2010WR009185
- Boano F., Revelli R., Ridolfi L. (2010) Effect of streamflow stochasticity on bedform-driven hyporheic exchange, *Advances in Water Resources*, 33(11), 1367-1374, doi:10.1016/j.advwatres.2010.03.005
- Boano F., Camporeale C., Revelli R. (2010) A linear model for the coupled surface-subsurface flow in a meandering stream, *Water Resources Research*, 46(7), W07535, doi:10.1029/2009WR008317
- Boano F., Demaria A., Revelli R., Ridolfi L. (2010) Biogeochemical zonation due to intrameander hyporheic flow, *Water Resources Research*, 46(2), W02511, doi:10.1029/2008WR007583
- Boano F., Poggi D., Revelli R., Ridolfi L. (2009) Gravity-driven water exchange between streams and hyporheic zones, *Geophysical Research Letters*, 36(20), L20402, doi:10.1029/2009GL040147
- Cavagnero P., Revelli R. (2009) Numerical model application for the restoration of the Racconigi Royal Park (CN, Italy), *Journal of Cultural Heritage*, 10(4), 514-519, doi:10.1016/j.culher.2009.01.004
- De Angelis E., Revelli R., Ridolfi L. (2009) Transport-diffusion models with nonlinear boundary conditions and solution by generalized collocation methods, *Computers and Mathematics with Applications*, 58(3), 558-565, doi:10.1016/j.camwa.2009.02.034
- Boano F., Revelli R., Ridolfi L. (2009) Quantifying the impact of groundwater discharge on the surface-subsurface exchange, *Hydrological Processes*, 23(15), 2108-2116, doi:10.1002/hyp.7278
- Revelli R., Boano F., Camporeale C., Ridolfi L. (2008) Intra-meander hyporheic flow in alluvial rivers, *Water Resources Research*, 44(12), W12428, doi:10.1029/2008WR007081
- Revelli R., Ridolfi L. (2009) Generalized collocation method for two-dimensional reaction-diffusion problems with homogeneous Neumann boundary conditions, *Computers and Mathematics with Applications*, 56(9), 2360-2370, doi:10.1016/j.camwa.2008.05.041
- Ridolfi L., Porporato A., Revelli R. (2008) Closure to "Green's function of the linearized de Saint-Venant Equations", *Journal of Engineering Mechanics*, 134(9), 809, doi:10.1061/(ASCE)0733-9399(2008)134:9(809.2)
- Boano F., Revelli R., Ridolfi L. (2008) Reduction of the hyporheic zone volume due to the stream-aquifer interaction, *Geophysical Research Letters*, 35(9), L09401, doi:10.1029/2008GL033554
- Boano F., Packman A.I., Cortis A., Revelli R., Ridolfi L. (2007) A continuous time random walk approach to the stream transport of solutes, *Water Resources Research*, 43(10), W10425, doi:10.1029/2007WR006062
- Boano F., Revelli R., Ridolfi L. (2007) Bedform-induced hyporheic exchange with unsteady flows, *Advances in Water Resources*, 30(1), 148-156, doi:10.1016/j.advwatres.2006.03.004
- Boano F., Camporeale C., Revelli R., Ridolfi L. (2006) Sinuosity-driven hyporheic exchange in meandering rivers, *Geophysical Research Letters*, 33(18), L18406, doi:10.1029/2006GL027630
- Boano F., Revelli R., Ridolfi L. (2006) Stochastic modelling of DO and BOD components in a stream with random inputs, *Advances in Water Resources*, 29(9), 1341-1350, doi:10.1016/j.advwatres.2005.10.007



- Ridolfi L., Porporato, A., Revelli R. (2006) Green's function of the linearized de Saint-Venant equations, *Journal of Engineering Mechanics*, 132(2), 125-132, doi:10.1061/(ASCE)0733-9399(2006)132:2(125)
- Revelli R., Ridolfi L. (2005) Nonlinear convection-dispersion models with a localized pollutant source, II - A class of inverse problems, *Mathematical and Computer Modelling*, 42(5-6), 601-612, doi:10.1016/j.mcm.2004.06.023
- Boano F., Revelli R., Ridolfi L. (2005) Source identification in river pollution problems: A geostatistical approach, *Water Resources Research*, 41(7), 1-13, doi:10.1029/2004WR003754
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Torino, February 28th, 2020

Prof. Roberto Revelli
