ANDREA RINALDO
born in Venice (Italy) on September 13, 1954

Professor of Hydrology and Water Resources
Director, Laboratory of Ecohydrology (ECHO)
Ecole Polytechnique Fédérale Lausanne (CH)[1]

Ordinario di Costruzioni idrauliche, DICEA, Università di Padova

1. RESEARCH INTERESTS

Transport phenomena in the hydrological cycle. Hydrogeomorphology. Ecohydrology. Stochastic modeling of natural phenomena. Networks in Nature. River networks as ecological corridors for species, populations and pathogens of water-borne disease. Spatial epidemiology of waterborne disease. Models of epidemic cholera and endemic schistosomiasis.

2. EDUCATION

Dott. Ing. (BS+MS) 1978 Università di Padova, Hydraulic Engineering (110/110 *summa cum laude*)
Ph.D. 1983 Purdue University, West Lafayette (IN, USA), Fluid Mechanics
D.Sc. (h.c.) 2014 Université du Québec-Laval

3. ACADEMIC RECORD (excerpta)[2]

FULL PROFESSOR, Italian Academic System, (1985-)
Chair of Hydrology, Professor of Civil & Environmental Engineering, *Università di Trento* (1986–1992)
Director, Department of Civil & Environmental Engineering, *Università di Trento* (1989–1992)
CHAIR OF HYDRAULIC CONSTRUCTIONS, PROFESSOR OF CIVIL & ENVIRONMENTAL ENGINEERING, Dipartimento di Ingegneria Civile e Ambientale, *Università di Padova* (Italy) (1992-)
Director, Istituto di Idraulica G. Poleni, *Università di Padova* (Italy) (1993–1997)
Director, International Centre for Hydrology "Dino Tonini", *Università di Padova* (Italy) (1993–2007)
Visiting Professor & Research Associate, Department of Civil and Environmental Engineering, *Massachusetts Institute of Technology* (USA) (1993–2001)
Visiting Professor, Department of Civil and Environmental Engineering, *Princeton University* (USA) (2004-2007)
PROFESSOR OF HYDROLOGY & WATER RESOURCES, and DIRECTOR, Laboratory of Ecohydrology, *École Polytechnique Fédérale Lausanne* (2008-)
Director, Institute of Environmental Engineering, *Ecole Polytechnique Fédérale Lausanne* (CH) (2010-2014)
SENIOR ADJUNCT RESEARCHER, EAWAG, Dübendorf (CH) (2011-)

4. INTERNATIONAL PRIZES/AWARDS/ACADEMY MEMBERSHIPS

International Prizes/Awards:

E. MUNSON AWARD, Purdue University (1982)
P. GATTO RESEARCH AWARD, Accademia Nazionale dei Lincei, Rome (1984)
HYDROLOGICAL SCIENCES AWARD (formerly Horton Award), American Geophysical Union (1999)
FELLOW, American Geophysical Union (2000)
DALTON MEDAL, European Geosciences Union (2005)
ERC ADVANCED GRANT FELLOWSHIP (2008)
BORLAND & HYDROLOGY DAYS AWARD, Colorado State University (2010)
4TH PRINCE SULTAN ABDULAZIZ INTERNATIONAL WATER PRIZE (Creativity), Riyadh (2010)
LUIGI TARTUFARI INTERNATIONAL PRIZE, Geosciences, Accademia Nazionale dei Lincei, Rome (2014)
DISTINGUISHED SCHOLAR MEDAL, ASABE, New Orleans (2015)

[1] Personal and Laboratory of Ecohydrology webpage at: www.epfl.ch/echo.
[2] Small caps indicate current appointments

Academy Memberships (excerpta):
Fellow (socio effettivo), ISTITUTO VENETO DI SCIENZE LETTERE ED ARTI, Venice (1995) (Secretary, Class of Sciences 2007-2015; vice-President, 2015-)
Fellow (socio effettivo), ACCADEMIA GALILEIANA DI SCIENZE, LETTERE ED ARTI, Padova (2000)
Fellow (socio effettivo), ACCADEMIA DEI GEORGOFILI, Firenze (2012)
Fellow (socio effettivo), ACCADEMIA NAZIONALE DELLE SCIENZE (DEI XL), Rome (2014)

Fellow, THE WATER ACADEMY, Oslo (1999)
Foreign Member, ROYAL SWEDISH ACADEMY OF SCIENCES, Stockholm (2006)
Foreign Member, US NATIONAL ACADEMY OF ENGINEERING, Washington (2006)
Foreign Member, US NATIONAL ACADEMY OF SCIENCES, Washington (2012)

Honorary degrees
DOCTORATE HONORIS CAUSA, INRS & Université du Québec (2014)

5. INVITED PRESENTATIONS (excerpta 2010-2015)
Include: i) a total of 34 Invited Talks at AGU and EGU Meetings (Hydrology, Geomorphology, Nonlinear Geophysics) ii) >40 invited Seminars or Keynote Lectures at international conferences.

6. KEYNOTE AND NAME LECTURES (excerpta 2010-2015)
THE BOUSSINESQ LECTURE, Amsterdam (2010); THE BORLAND LECTURE, Fort Collins (2010); THE PRINCE ABDULAZIZ WATER LECTURE, Riyadh (2010); 200TH ANNIVERSARY LECTIO MAGISTRALIS, Istituto Veneto di Scienze Lettere ed Arti, Venice (2011); THE WATER INSTITUTE DISTINGUISHED SCHOLAR LECTURE, Gainesville (2012); 418TH ANNIVERSARY LECTIO MAGISTRALIS, Accademia dei Concordi (2013); the RIVERFLOW 2014 Keynote Lecture, Lausanne (2014); AGU CHAPMAN CONFERENCE on *Catchment spatial organization and complex behavior*, Luxembourg (2014); DISTINGUISHED SCHOLAR KEYNOTE LECTURE, American Society of Biological and Agricultural Engineering, New Orleans (2015); International IRTG-Conference *Integrated Hydrosystem Modelling*, Tübingen (2015); International Workshop on *Living systems: from interaction patterns to critical behavior,* Venice International University at San Servolo (2015); International Workshop on *Coupled Hydrological models*, Padua, 2015;

7. ORGANISATION OF INTERNATIONAL CONFERENCES (excerpta 2010-2015)
Convener (excerpta): Summer Schools on *Environmental Dynamics*, Istituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, among which: *Pathways to Environmental Sustainability* (2008) *Climate Forcings and Global Patterns* (2009), *Global Biogeochemical Cycles* (2012), *Discounting and evaluating environmental policies* (2014); *Latsis Symposium* on *Ecohydrology*, EPFL (2011)

8. OTHER ACADEMIC RESPONSIBILITIES (excerpta)
Academic responsibilities (excerpta): Elected member, Academic Senate, Università di Padova (Italy) (1994-1998, 2002 -2008); Director, Doctoral School on Civil & Environmental Engineering Sciences, Università di Padova (Italy) (1999-2007); Secretary, Class of Sciences, Istituto Veneto di Scienze, Lettere ed Arti, Venezia (2006-2015), now Vice-President (2015-); EPFL Academic Promotions Committee (2009-2011); ENAC Academic Promotions Committee, EPFL (2011-2014), as Chairman (2012-2014).
Invited Foreign Member of PhD Committees (excerpta): Massachussetts Institute of Technology, Wageningen Agricultural University, KTH Stockholm, Princeton University, University of Sidney.
Member, International Scientific Committees (excerpta): Zentrum *S. Franscini*, ETHZ (CH) (1996-1998); The Bernoulli Society (2000-2003); *SENSE Environmental Sciences* Review Committee (NL)

(2007), *CCES* Steering Board, ETH, Zurich (CH) (2008-); Scientific Advisory Board, *Helmholtz-Zentrum für Umweltforschung GmbH* (UFZ), Leipzig (GE) (2011-2014).
Member, Award and Medal Committees (excerpta): *Gatto* Award, Accademia Nazionale dei Lincei (2004-2014); AGU *Hydrological Sciences Award* Committee (2003-2005) (as Chairman, 2005); AGU *Horton Medal* Committee (2004-2006); EGU *Dalton Medal* Committee (2005-2007); *AGU Fellows* Union Committee (2005-2010)

Editorial Boards (excerpta): *Advances in Water Resources,* Elsevier (1994-2004)*; Water Resources Research,* American Geophysical Union (2001-2011)*; Proceedings of the US National Academy of Science* PNAS, US National Academy of Sciences (2013-)

Editor: *Advances in Water Resources*, Elsevier (2011-2015); *Proceedings of the US National Academy of Science,* NAS (2014-)

Top 10 publications (by Author's choice)[3]

1. Rodriguez-Iturbe, I. and A. RINALDO, *Fractal River Basins. Chance and Self-Organization*, Cambridge Univ. Press, New York, 1997 (1347 citations)
2. Banavar, J.R., A. Maritan, A. RINALDO, Size and form in efficient transportation networks, *Nature*, 399, 130-133, 1999 (597 citations)
3. Bellin, A., P. Salandin, A. RINALDO, Simulation of dispersion in hetereogeneous porous formations. Statistics, first-order theories, convergence of computations, *Water Resources Research*, 28(9), 2211-2227, 1992 (249 citations)
4. RINALDO, A., I. Rodriguez-Iturbe, R. Rigon, E. Ijjasz-Vasquez, R.L. Bras, Self-organized fractal river networks, Physical Review Letters, 70(6), 822-825, 1993 (196 citations)
5. Rodriguez-Iturbe, I., A. RINALDO, R. Rigon, E. Ijjasz-Vasquez, R.L. Bras, Energy dissipation, runoff production and the 3-dimensional structure of river basins, *Water Resources Research*, 28(4), 1095-1103, 1992 (386 citations)
6. RINALDO, A., I. Rodriguez-Iturbe, R. Rigon, E. Ijjasz-Vasquez, R.L. Bras, Minimum energy and fractal structure of drainage networks, *Water Resources Research*, 28(9), 2183-2195, 1992 (190 citations)
7. RINALDO, A., A. Marani, R. Rigon, Geomorphological Dispersion, *Water Resources Research*, 27(4), 513-525, 1991 (251 citations)
8. RINALDO A, W.E. Dietrich, R. Rigon, G.K. Vogel, I. Rodriguez-Iturbe, Geomorphological signatures of varying climate, *Nature*, 374 (6523), 632-635, 1995 (118 citations)
9. Banavar, J.R., J. Damuth, A., Maritan, A. RINALDO, Supply-demand balance and metabolic scaling, *Proceedings of the National Academy of Sciences (PNAS)*, 99, 10506-10509, 2002 (186 citations)
10. Muneepeerakul, R., E. Bertuzzo, H.J. Lynch, W.F. Fagan, A RINALDO, I. Rodriguez-Iturbe, Neutral metacommunity models predict fish diversity patterns in Mississippi-Missouri basin, *Nature* 453 (7192), 220-222 (185 citations)

[3] As of September 26, 2015. Total citations=12035. (source: Google Scholar) *h*-index= 60, *i10*-index=171. Since 2010: *h*-index =44, *i10*-index=149. Personal page at http://scholar.google.ch/citations?user=27F9Y3cAAAAJ&hl=it&oi=ao

ANDREA RINALDO – PUBLICATION LIST (excerpta 2010-2015)

JOURNAL PAPERS[4]

2015 (until September)

1. Carrara, F., A. Giometto, M. Seymour, A. RINALDO, F. Altermatt, Inferring species interactions in ecological communities: a comparison of methods at different levels of complexity, *Methods in Ecology and Evolution*, 6 (8), 895-906, 2015
2. Righetto, L., R.U. Zaman, Z.H. Mahmud, E. Bertuzzo, L. Mari, R. Casagrandi,. M. Gatto. S. Islam, A. RINALDO, Detection of Vibrio cholerae O1 and O139 in environmental waters of rural Bangladesh: a flow-cytometry-based field trial, *Epidemiology & Infection*, 143 (11), 2330-2342, 2015
3. Giometto, A., M. Formentin, A. RINALDO, A. Maritan, Sample and population exponents of generalized Taylor's law, *Proceedings of the US National Academy of Sciences PNAS,* 112 (25), 7755-7760, 2015
4. Suweis, S., J.A. Carr, A. Maritan, A. RINALDO, P. D'Odorico, Resilience and reactivity of global food security, *Proceedings of the US National Academy of Sciences PNAS*, 112 (22), 6902-6907, 2015
5. Giometto, A., F. Altermatt, A. Maritan, R. Stocker, A. RINALDO, Generalized receptor law governs phototaxis in the phytoplankton Euglena gracilis, *Proceedings of the US National Academy of Sciences PNAS,* 112 (22) 7045-7050, 2015
6. RINALDO, A., P. Benettin, C.J. Harman, M. Hracowitz, Y. Van der Velde, K.J. McGuire, E. Bertuzzo, G. Botter, Storage selection functions: A coherent framework for quantifying how catchments store and release water and solutes, *Water Resources Research*, 51(6), 4840-4847, 2015
7. Comola, F., B. Schaefli, P. Da Ronco, G. Botter. M. Bavay, A. RINALDO, Scale-dependent effects of solar radiation patterns on the snow-dominated hydrologic response, *Geophysical Research Letters*, 42 (10), 3895-3902, 2015
8. Benettin, P., J.W. Kirchner, A. RINALDO, G. Botter, Modeling chloride transport using travel time distributions at Plynlimon, Wales, *Water Resources Research*, 51(5), 3259-3276, 2015
9. Carrara, F., A.Giometto, M. Seymour, A. RINALDO, F. Altermatt, Experimental evidence for strong stabilizing forces at high functional diversity of aquatic microbial communities, *Ecology*, 96(5), 1340-1350, 2015
10. Bertuzzo, E., I. Rodriguez-Iturbe, A. RINALDO, Metapopulation capacity of evolving fluvial landscapes, *Water Resources Research*, 51(4), 2696-2706, 2015
11. Queloz, P., E. Bertuzzo, L. Carraro, G. Botter, F. Miglietta, P.S.C. Rao, A. RINALDO, Transport of fluorobenzoate tracers in a vegetated hydrologic control volume: 1. Experimental results, *Water Resources Research*, 51(4), 2773-2792, 2015
12. Queloz, P., E. Bertuzzo, L. Carraro, G. Botter, F. Miglietta, P.S.C. Rao, A. RINALDO, Transport of fluorobenzoate tracers in a vegetated hydrologic control volume: 2. Theoretical inferences and modeling, *Water Resources Research*, 51(4), 2793-2806, 2015
13. del Jesus, M., A. RINALDO, I. Rodriguez-Iturbe, Point rainfall statistics for ecohydrological analyses derived from satellite integrated rainfall measurements, Water Resources Research, 51(4), 2974-2985, 2015
14. Mari, L., E. Bertuzzo, F. Finger, R. Casagrandi, M. Gatto. A. RINALDO, On the predictive ability of mechanistic models for the Haitian cholera epidemic, *Journal of the Royal Society Interface*, 12(104), 20140840, 2015
15. Comola, F.; B. Schaefli, A. RINALDO, M. Lehning, Thermodynamics in the hydrologic response: Travel time formulation and application to Alpine catchments, *Water Resources Research*, 51(3), 1671-1687, 2015
16. Passadore, G., A. Sottani, L. Altissimo, A. RINALDO, Using heat as a tracer to characterize streambed water fluxes of the Brenta River (Italy), *Engineering Geology -- River basins, Reservoir Sedimentation and Water Resources*, 3, 241-244, 2015
17. Ciddio, M., Mari, L., M. Gatto, A. RINALDO, R. Casagrandi, The temporal patterns of disease severity and prevalence in schistosomiasis, *Chaos*, 25(3), 036405, 2015
18. Foti, R., M. del Jesus, A. RINALDO, I. Rodriguez-iturbe, Demodulation of time series highlights impacts of hydrologic drivers on the Everglades ecosystem, *Ecohydrology*, 8(2), 204-213, 2015

[4] All entries are taken from the Web of Science (ISI Thompson-Reuters). Total number of Journal papers: 238 (11722 citations, *h*-index=59, *i10*-index=168). Total number of Proceeedings Papers, Book Chapters and Abstracts (AGU,EGU) not reported here for brevity: 320.

2014

1. RINALDO, A., R. Rigon, J.R. Banavar, A. Maritan, I. Rodriguez-Iturbe, Evolution and selection of river networks: statics, dynamics, complexity, *Proceedings of the US National Academy of Sciences PNAS*, 111(7), 2417-2424, 2014
2. Banavar, J.R., T. Cooke. A. RINALDO, A. Maritan, Form, function and evolution of living organisms, *Proceedings of the US National Academy of Sciences PNAS*, 111(9), 3332-3337, 2014
3. Giometto, A., A. RINALDO, F. Carrara, F. Altermatt, Emerging predictable features on replicated biological invasion fronts, *Proceedings of the US National Academy of Sciences PNAS*, 111(1), 297-301, 2014
4. Carrara, F., A. RINALDO, A. Giometto, F. Altermatt, Complex interaction of dendritic connectivity and hierarchical patch size on biodiversity in river-like landscapes, *American Naturalist*, 183(1), 13-25, 2014
5. Mari, L., R. Casagrandi, E. Bertuzzo, A. RINALDO, M. Gatto, Metapopulation persistence and species spread in river networks, *Ecology Letters*, 17, 426–434, 2014
6. Ceola, S., E. Bertuzzo, L. Mari, G. Botter, I. Hodl, T.J. Battin, M. Gatto, A. RINALDO, Light and hydrologic variability as drivers of stream biofilm dynamics in a flume experiment, *Ecohydrology*, 17(4), 426-434, 2014
7. Ceola S., E. Bertuzzo, L. Mari, G. Botter, I. Hodl, T.J. Battin, M. Gatto, A. RINALDO, Hydrologic controls on basin-scale distributions of benthic invertebrates, *Water Resources Research*, 50(4), 2903-2920, 2014
8. Hodl, I., L. Mari, E. Bertuzzo, S. Suweis, K. Besemer, A. RINALDO, T.J. Battin, Biophysical controls on cluster dynamics and architectural differentiation of microbial biofilms in contrasting flow environments, *Environmental Microbiology,* 16(3), 802-812, 2014
9. Knox, A., E. Bertuzzo, L. Mari, D. Odermatt, E. Verrecchia, A. RINALDO, Optimizing a remotely sensed proxy for plankton biomass in Lake Kivu, *International Journal of Remote Sensing*, 35(13), 5219-5238, 2014
10. Finger, F., A. Knox, E. Bertuzzo, L. Mari. D. Bompangu, M. Gatto, I. Rodriguez-Iturbe, A. RINALDO, Cholera in the lake Kivu region (DRC): Integrating remote sensing and spatially explicit epidemiological modeling, *Water Resources Research*, WR015521, 5624-5637, 2014
11. Widder, S., K. Besemer, G.A. Singer, S. Ceola, E. Bertuzzo, C. Quince, W.T. Sloan, A. RINALDO, T.J. Battin, Fluvial network organization imprints on microbial co-occurrence networks, *Proceedings of the US National Academy of Sciences PNAS*, 11(35) 12799-12804, 2014
12. Kuehn, J., F. Finger, E. Bertuzzo, S. Bourgeaud, M. Gatto, A. RINALDO, M. Blokesch, Glucose- but not rice-based oral rehydration therapy enhances the production of virulence determinants in the human pathogen Vibrio cholerae, *PLoS Neglected Tropical Diseases*, 8 (12), e3347, 2014
13. Rossel, F., J. Gironas, A. Mejia, A. RINALDO, F. Rodriguez, Spatial characterization of catchment dispersion mechanisms in an urban context, *Advances in Water Resources*, 74, 290-301, 2014
14. Mari, L., R. Casagrandi, E. Bertuzzo, A. RINALDO, M. Gatto, Floquet theory for seasonal environmental forcing of spatially explicit waterborne epidemics, *Theoretical Ecology*, 7 (4), 351-365, 2014

2013

1. Gatto, M., L. Mari, E. Bertuzzo, L. Righetto, R. Casagrandi, I. Rodriguez-Iturbe, A. RINALDO, Spatially explicit conditions for waterborne pathogen invasion, *American Naturalist*, 182(3), 328-346, 2013.
2. Botter, G., S. Basso, I. Rodriguez-Iturbe, A. RINALDO, Resilience of river flow regimes, *Proceedings of the US National Academy of Sciences PNAS*, 110(32), 12925-12030, 2013.
3. Righetto. L., E. Bertuzzo, L. Mari, R. Casagrandi, M. Gatto. A. RINALDO, Rainfall mediations in the spreading of epidemic cholera, *Advances in Water Resources*, 60, 34-46, 2013.
4. Schaefli. B., A. RINALDO, G. Botter, Analytic probability distributions for snow-dominated streamflow, *Water Resources Research*, 49(5), 2701-2713, 2013.
5. Dorsatz, J.M, J. Gironas, C. Escauriaza, A. RINALDO, The geomorphometry of endorheic drainage basins: implications for interpreting and modelling their evolution, *Earth Surface Processes and Landforms,* 38(15), 1881-1896, 2013.
6. Tobin, C., B. Schaefli, L. Nicotina, A. RINALDO, Improving the degree-day method for sub-daily melt simulations with physically-based diurnal variations, *Advances in Water Resources*, 55, 149-164, 2013.

7. Foti, R., M. del Jesus, A. RINALDO, I. Rodriguez-Iturbe, Signs of critical transition in the Everglades wetlands in response to climate and anthropogenic changes, *Proceedings of the US National Academy of Sciences PNAS*, 110(6), 6296-6300, 2013.
8. Ceola, S., I. Hoedl, M. Adboller, G. Singer, E. Bertuzzo, T. Battin, A. RINALDO, Hydrologic variability affects invertebrate grazing on phototrophic biofilms in stream microcosms, *PLOS One*, 8(4), e60629, 2013.
9. Giometto, A., F. Altermatt, F. Carrara, A. RINALDO, Scaling body size fluctuations, *Proceedings of the US National Academy of Sciences PNAS*, 110(2), 4646-4650, 2013.
10. Suweis, S., A. RINALDO, A. Maritan, P. D'Odorico, Water-controlled wealth of nations, *Proceedings of the US National Academy of Sciences PNAS,* 110(11), 4230-4233, 2013.
11. Schaefli, B. A. RINALDO, G. Botter, Analytic probability distributions for snow-dominated streamflow, *Water Resources Research,* 49(5), 2701-2713, 2013.
12. Mutzner, R., E. Bertuzzo, P. Tarolli, S. Weijs, L. Nicotina, S. Ceola, N. Tomasic, I. Rodriguez-Iturbe, M.B. Parlange, A. RINALDO, Geomorphic signatures on Brutsaert base flow recession analysis, *Water Resources Research,* doi: 10.1002/wrcr.20417, 2013.
13. Passalacqua, P., C. Paola, S. Lanzoni, A. RINALDO, Geomorphic signatures of deltaic processes and vegetation: The Ganges-Brahmaputra-Jamuna case study, *Journal of Geophysical Research: Earth Surface*, 118(3), 1838-1849, 2013.
14. D'Alpaos, A., L. Carniello, A. RINALDO, Statistical mechanics of wind wave induced erosion in shallow tidal basins: inferences from the Venice lagoon, *Geophysical Research Letters*, 40(13), 3402-3407, 2013.
15. Hoedl, I., L. Mari, E. Bertuzzo, S. Suweis, K. Besemer, A. RINALDO, T. Battin, Biophysical controls on cluster dynamics and architectural differentiation of microbial biofilms in contrasting flow environments, *Enviromental Micriobiology*, doi:10.1111/1462-2920.12205, 2013.
16. Bertuzzo, E., M. Thomet, G. Botter, A. RINALDO, Catchment-scale herbicide transport : Theory and application, *Advances in Water Resources*, 52, 232-242, 2013.
17. Barry, A.B., G.G. Katul, C.T. Miller, A. Rinaldo, Advances in Water Resources : 35th Anniversary Issue Preface, *Advances in Water Resources*, 51, 1-2, 2013.
18. Konar, M., M.J. Todd, R. Muneepeerakul, A. Rinaldo, I. Rodriguez-Iturbe, Hydrology as a driver of biodiversity : Controls on carrying capacity, niche formation, and dispersal, *Advances in Water Resources*, 51, 317-325, 2013.
19. Benettin, P., Y. Van der Velde, S.E.A.T.M. van dr Zee, A. RINALDO, G. Botter, Chloride circulation in a lowland catchment and the formulation of transport by travel time distributions, *Water Resources, Research*, 49(8), 4619-4632, 2013.
20. Benettin, P., A. RINALDO, G. Botter, Kinematics of age mixing in advection-dispersion models, *Water Resources Research*, 49(12), 8539-8551, 2013

2012

1. Konar, M., C. Dalin, N. Hanasaki, A. RINALDO, I. Rodriguez-Iturbe, Temporal dynamics of blue and green virtual water trade networks, *Water Resources Research*, 48, W07509, 2012.
2. Suweis, S., A. RINALDO, A. Maritan, An exactly solvable coarse-grained model for species diversity *Journal of Statistical Mechanics - Theory and Experiment*, P07017, 2012.
3. Zanardo, S., N. B. Basu, G. Botter, A. RINALDO, P.S.C. Rao, Correction to : Dominant controls on pesticide transport from tile to catchment scale: Lessons from a minimalist model, *Water Resources Research*, 48, doi : 10.1029/2012WR012775, 2012.
4. Stefanon, L., L. Carniello, A. D'Alpaos, A. RINALDO, Signatures of sea level changes on tidal geomorphology: Experiments on network incision and retreat, *Geophysical Research Letters*, 39, L12402, 2012
5. Todd, M. J., R. Muneepeerakul, F. Miralles-Wilhelm, A. RINALDO, I. Rodriguez-Iturbe, Possible climate change impacts on the hydrological and vegetative character of Everglades National Park, Florida, *Ecohydrology*, 5(3), 326-336, 2012.
6. Passadore, G., M. Monego, L. Altissimo, A. Sottani, M. Putti, A. RINALDO, Alternative conceptual models and the robustness of groundwater management scenarios in the multi-aquifer system of the Central Veneto Basin, Italy, *Hydrogeology Journal,* 20(3), 419-433, 2012.
7. Zanardo, S., N.B. Basu, G. Botter, A. RINALDO, P.S.C. Rao, Dominant controls on pesticide transport from tile to catchment scale: Lessons from a minimalist model, *Water Resources Research*, 48, W04525, 2012.

8. RINALDO, A., E. Bertuzzo, L. Mari, L. Righetto, M. Blokesch, M. Gatto, R. Casagrandi, M. Murray, S. M. Vesenbeckh, I. Rodriguez-Iturbe, Reassessment of the 2010-2011 Haiti cholera outbreak and rainfall-driven multiseason projections, *Proceedings of The US National Academy of Sciences PNAS*, 109(17), 6602-6607, 2012.
9. Dalin, C., M. Konar, N. Hanasaki, A. RINALDO, I. Rodriguez-Iturbe, Evolution of the global virtual water trade network, *Proceedings of the US National Academy of Sciences PNAS*, 109(16), 5989-5994, 2012.
10. Carrara, F., F. Altermatt, I. Rodriguez-Iturbe, A. RINALDO, Dendritic connectivity controls biodiversity patterns in experimental metacommunities, *Proceedings of the US National Academy of Sciences PNAS*, 109(15), 5761-5766, 2012.
11. Bertuzzo, E., L. Mari, L. Righetto, M. Gatto, R. Casagrandi, I. Rodriguez-Iturbe, A. RINALDO, Hydroclimatology of dual-peak annual cholera incidence: Insights from spatially explicit model, *Geophysical Research Letters*, 39, L05403, 2012.
12. Righetto, L., R. Casagrandi, E. Bertuzzo, L. Mari, M. Gatto, I. Rodriguez-Iturbe, A. RINALDO, The role of aquatic reservoir fluctuations in long-term cholera patterns, *Epidemics*, 4(1), 33-42, 2012.
13. Mari, L., E. Bertuzzo, L. Righetto, R. Casagrandi, M. Gatto, I. Rodriguez-Iturbe, A. RINALDO, Modelling cholera epidemics: the role of waterways, human mobility and sanitation, *Journal of the Royal Society Interface,* 9(67), 376-388, 2012.
14. Del Jesus, M., R. Foti, A. RINALDO, I. Rodriguez-Iturbe, Maximum entropy production, carbon assimilation and the spatial organization of vegetation in river basins, *Proceedings of The US National Academy of Sciences PNAS*, 109(51), 20837-20841, 2012.
15. Foti, R. M. del Jesus, A. RINALDO, I. Rodgiguez-Iturbe, Hydroperiod regime controls the organization of plant species in wetlands, *Proceedings of The US National Academy of Sciences PNAS*, 109(48), 19596-19600, 2012.
16. Gatto, M., L. Mari. E. Bertuzzo, L. Righetto, R. Casagrandi, I. Rodriguez-Iturbe, A. RINALDO, Generalized reproduction numbers and the prediction of patterns in waterborne disease, *Proceedings of The US National Academy of Sciences PNAS*, 109(48), 19703-19708, 2012.
17. Tobin, C., A. RINALDO, B. Schaefli, Snowfall limit forecasts and hydrologic modelling, *Journal of Hydrometeorology,* 13(5), 1507-1519, 2012.
18. Mari, L., E. Bertuzzo, L. Righetto, R. Casagrandi, I. Rodriguez-Iturbe, M. Gatto, A. RINALDO, On the role of human mobility in the spread of cholera epidemics : towards an epidemiological movement ecology, *Ecohydrology*, 5(5), 531-540, 2012.
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