

11 October 2017

University of Minho Campus de Gualtar Auditorium A 1



Scientific programme

	Scientific programme
10:00 h	Welcome
10:05 – 10:50 h	Mauro Agnoletti, University of Florence, Italy
	The landscape approach and the global challenges in sustainable development
10:50 – 11:35 h	Paolo D'Odorico, University of California Berkeley, USA
	Water and food security in a globalized world
	Coffee Break
12:00 – 12:45 h	Guy Woodward, Imperial College of London, UK
	Simplicity on the other side of complexity: Understanding ecological responses to environmental stressors
12:45 - 13:15 h	Vitor Cunha, IB-S/DSTgroup, University of Minho, Portugal
	Digital construction towards a smarter, more sustainable and interactive built environment

Inauguration programme

15:30 h

Inaugural session

On behalf of the IB-S Cândida Lucas and Paulo Lourenço, UMinho

On behalf of the Strategic Council of IB-S José Teixeira, DSTgroup

Rector of the University of Minho António Cunha

Deputy Minister for Enviroment José Mendes

Minister of Science, Technology and Higher Education Manuel Heitor

17:00 h

Cocktail and visit to IB-S building of the Campus of Gualtar

Mauro Agnoletti Università degli Studi di Firenze, Italia www.landscape.unifi.it

Born in Lucignano (Arezzo – Italy) 8-8-1954. Associate professor, University of Florence, Faculty of Agriculture. Habilitation to Full Professor in Territorial Planning and in Economic History. He is the Director of the Laboratory for Landscape and Cultural Heritage of the University of Florence, School of Agriculture where he teaches the courses of landscape planning and environmental history. He had teaching experiences in the USA, Germany, France, Poland and Sweden.



Most his recent activities are dedicated to the valorization of landscape resources. He has collaborated to the production of political documents and laws for Italy and for international institutions and was one of the authors of the national strategic plan for rural development 2007-2013. He is the Chair of the Scientific Committee, of the FAO "Globally Important Agricultural Heritage Systems" program and President of the landscape observatory of the Regional Government of Tuscany. He has been the chair of the Scientific Committee of the UNESCO-SCBD declaration on the linkages between cultural and biological diversity of 2014. Is the Co-Editor in chief of "Global Environment Journal of Interdisciplinary History", White Horse Press, and - Editor in chief of the book series on Environmental History by Springer Verlag. In 2006 he had a diploma award for studies on rural landscape by the Ministry of the Environment. In 2008 he was awarded with the "Ideal city" prize by the Regional Government of Tuscany, for the project of the Rural Landscape Park of Moscheta. He has published more than 250 scientific papers and has been the author/editor of 20 books. His book "Italian Historical Rural Landscapes" by Springer Verlag has sold more than 18,000 copies in 123 countries of the world.

Paolo D'Odorico University of California, Berkeley, USA

https://ourenvironment.berkeley.edu/people/paolo-dodorico

Paolo D'Odorico is professor of Hydrology at the Univ. of California, Berkeley. His research focuses on the role of hydrological processes in the functioning of terrestrial ecosystems and societies. Starting from analyses of mechanisms underlying the coupling between hydrological processes and the biota, his research has contributed to the emergence of the field of ecohydrology. Through field observations and modelling studies he is studying new mechanisms of desertification and factors contributing to the resilience of the desert margins. His work highlighted the effect of positive



feedbacks between vegetation and resource (e.g., nutrients, water, light, or energy) availability on the resilience of dry tropical forests, freshwater wetlands, mangrove swamps, and seagrass meadows. His research has also shown how environmental variability may increase the complexity of ecosystem dynamics by inducing new bifurcations, pattern formation, and enhancing ecosystem resilience. He is currently investigating the global patterns of virtual water trade and international land investments and their impacts on water equity, societal resilience, and food security. He has received the *Paul Witherspoon Lectureship* (American Geophysical Union, 2016), the *Sustainability Science Award* (Ecological Society of America, 2009), the *Fulbright Distinguished Lectureship* (2011), the *Maury-Tice Environmental Prize* (University of Virginia, 2013), and the *Distinguished Investigator Award* (University of Virginia, 2013). He has held the *Ernest H. Ern Chair Professorship in Environmental Sciences* (University of Virginia, 2011-2016). He is a *Fellow of the John Simon Guggenheim Memorial Foundation* (2011) and the *American Geophysical Union* (2016). He is Editor-in-Chief of *Advances in Water Resources*. He has edited *Dryland Ecohydrology* (Springer, 2006) and co-authored *Noise-Induced Phenomena in the Environmental Sciences* (Cambridge Univ. Press, 2011), *Elements of Physical Hydrology*, 2nd ed. (Johns Hopkins Univ. Press, 2014), *Global Deforestation* (Cambridge Univ. Press, 2016), and more than 200 articles in peer-reviewed journals.

Guy Woodward Imperial College London, UK

https://sites.google.com/site/drguywoodward

Guy Woodward is Professor of Ecology at the Imperial College London. His research is focused on the impacts of environmental stress (climate change, chemical pollution, species invasions and habitat alteration) on multiple levels of biodiversity (e.g., species richness, functional and trophic diversity). He is currently working with world experts in a range of disciplines to develop a more unified theoretical framework by identifying simple rules to predict the behaviour of these complex systems.



He has given >80 presentations, including >30 invited talks, at international conferences, and >10 plenary/keynotes. He has published >120 peer-reviewed papers since 2001, including papers in *Nature, Science*, and *Nature Climate Change*, and >15 edited books or thematic journal volumes (Google Scholar h index 49). Since 2010 he has been the Series Editor for Advances in Ecological Research. He has been awarded >£11M of external research grants since 2005 as PI or Co-I, and is leading a component of the EU AQUACOSM Project (€10M). He has supervised >20 PhD students and >10 Postdocs. He sits on a range of academic and industrial committees and advisory boards and he led the British Ecological Society Aquatic Group from 2013-2016.

Vitor Cunha
University of Minho, Portugal
IB-S, Instituto de Ciência e Inovação para a Bio-Sustentabilidade,
Universidade do Minho, Portugal
http://ib-s.uminho.pt/

Vítor Cunha is Assistant Professor at the Institute of Science and Innovation for Bio-Sustainability from the University of Minho. He holds the Chair dst/IB-S "Building the future: automation and modularization". His background is on the experimental and computational mechanics of fibre reinforced composites.



Currently, his research focuses on additive manufacturing techniques, cyber-physical systems, development of functional graded composites, and multifunctional and sustainable materials. He is author of nearly one hundred technical / scientific publications, and has participated as leader or team leader / member in several national and international research projects with a total competitive funding over 1.5M€. He is a Senior Member of the Portuguese Engineers Association and member of distinct technical committees from fib - International Federation for Structural Concrete, RILEM - International Union of Laboratories and Experts in Construction Materials, Systems and Structures and COST – European Cooperation in Science and Technology.



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