# MARION DUMAS

# PERSONAL INFORMATION

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# EDUCATION

2009-presentColumbia UniversityPhDPhD Candidate in Sustainable Development · School: International and Public Affairs Dissertation: The Role of Judicial Institutions in Environmental Governance Committee: Michael Ting, Johannes Urpelainen, Robert Bates. Many environmental decisions in the U.S. happen in the courts, where diverse interest groups iteratively renegotiate the meaning of laws to advance their conception of the public interest. So too for other areas of policy and for an increasing number of new ann old democracies worldwide. In three papers, the dissertation explores the interaction between legal and political institutions in the political economy of the environment. I employs game theory and network analysis to explores how the interaction between courts, interest groups and political institutions affect political compromise, the dynamics of laws and collective learning.Mellon Fellow2013-2015Mellon Interdisciplinary Fellows Program Interdisciplinary Center for Innovative Theory and Empirics 2011-2012Exchange ScholarDepartment of Government · School: GSAS	rest e
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2011-2012Harvard UniversityExchange ScholarDepartment of Government · School: GSAS	
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2007-2009 ETH Zurich	
Masters of Science Major in Ecology and Evolution	
Minor in Human-Environmental Systems	
Thesis: Developing a model and database for assessing food production systems' sensitivity to phosphate rock shortages at the world scale	
2002-2006 Massachusetts Institute of Technology	
Bachelor of Science       Major: Environmental Sciences, Department of Earth, Atmospheric and Planetary         Sciences       Minor: Applied Mathematics	

#### WORKING PAPERS

Dumas, M., 2014. *Job Market Paper* Taking the Law to Court: Citizen Suits and the Legislative Process.

Dumas, M., Rising, J. and Urpelainen, J., 2014. *Under Review* Path Dependence, Political Competition, and Renewable Energy Policy: A Dynamic Model.

Dumas, M. and J. Urpelainen, 2014. *Under Review* The Institutional Foundations of Sustainability: What Can We (Not) Learn from Political Economy?

Dumas, M., J. Castner, and P. Gocev, 2012. *Working Paper* Causal Inference with Spatially Disaggregated Data: Some Potentials and Limits.

#### WORK IN PROGRESS

Dumas, M., 2015, expected. The Political Dynamics of Legal Rules: a Network Analysis Approach

Dumas, M., 2015, expected. Legitimacy and Long-term Governance

## PUBLICATIONS

Dumas, M., Frossard, E. and R. Scholz, 2011. Modeling Biogeochemical Processes of Phosphorus for Global Food Supply, *Chemosphere* Vol 84(6): 798-805.

Burt, D., M. Dumas, N. Spring and D. Vaccari, 2012. Global Phosphorus: Geological Sources and Demand-driven Production, In Wyant, K.A. et al., Eds., *Phosphorus, Food, and Our Future*, New York: Oxford University Press.

Dumas, M. and Y. Blumer, 2008. *Technical Report* Participatory Decision Making Processes in Radioactive Waste Management, *Nucleao8* 

### GRANTS AND AWARDS

2013 · Mellon Fellowship
2010 · Sasakawa Young Leaders Fellowship Fund Grant for
summer research
2010 · ETH Medal for Excellence in Research
2009-2014 · Columbia Graduate Fellowship
2009-2012 · Stanford Graduate Fellowship (declined)
2006 · MIT Goetze Prize for Undergraduate Research

## TEACHING EXPERIENCE

	2015 Complexity Science
Co-Instructor	Instructors: Prof. Upmanu LALL, James RISING, Marion DUMAS
	2014 Economics of Energy
Teaching Assistant	Instructors: Prof. Gernot Wagner
	2012-2014 Political Economy of Development
Teaching Assistant	Instructors: Prof. Christopher BLATTMAN and Prof. Victoria MURILLO
	2011 Environmental Science for Sustainable
	Development
Teaching Assistant	Instructor: Prof. John Mutter
	RESEARCH EXPERIENCE AND ACADEMIC SERVICE
	2012 Statistical and game-theoretic modeling
Research Assistant	Prof. Macartan Humphreys
	2011 Research Collaboration
Visiting Researcher	Chinese Academy of Sciences, Nanjing
Keseurcher	2013-present Complexity Science
Seminar Organizer	Graduate Seminar
	OTHER WORK EXPERIENCE
Consultant	2006-2007 · Utopies, Strategies et Developpement Durable, Paris, France Description: Co-lead of the sustainable construction working group
Environmental Engineer Intern	2003 · Consorzio Venezia Nuova, Venice, Italy Description: Computational Modeling of the Venice Lagoon's Dynamics
	OTHER INFORMATION
Workshops and Summer Schools	June 2013 · Santa Fe Institute Advanced Graduate Workshop in Computational Social Science
Summer Schools	Core Faculty: John Miller · Scott Page
	December 2012 · Workshop in Institutional Analysis Coase Institute Core Faculty: Lee Велнам · John Nye · Gary Libecap
	September 2010 · Oxford Poverty & Human Development Initiative (Amman,
	Jordan)
	Capability and Multidimensional Poverty Graduate Summer School Core Faculty: Sabina Alkire
Languages	French (native), German (quasi-fluent)
Computer	python,matlab, R, mathematica, Stata, bash scripting, GIS
Languages	

December 1, 2014