

Tatiana Filatova

Curriculum Vita

University of Twente, Faculty of Behavioural, Management and Social sciences, Department of Governance and Technology for Sustainable Development (CSTM)
P.O. Box 217, 7500 AE Enschede, The Netherlands
T.Filatova@utwente.nl

University of Technology Sydney, Faculty of Engineering and Information Technology, School of Information, Systems and Modeling (ISM)
PO Box 123 Broadway, Ultimo NSW 2007, Australia
Web: <http://tatianafilatova.weebly.com/>

Education

- 2005 – 2009 *PhD (Cum Laude)*, Environmental Economics, Agent-Based Modeling
University of Twente (UT), The Netherlands
Advisers: Prof. Anne van der Veen (Department of Water Engineering and Management, UT) & Prof. Dawn C. Parker (Department of Computational Social Science, George Mason University, USA)
- 2007 Department of Computational Social Science, George Mason University, USA
Scholarship for 2 PhD courses by Prof. Rob Axtell (A+) and Prof. Dawn C. Parker (A)
- 1998 – 2003 *MSc (Cum Laude)*, Information Systems in Economics
State Technical University, Chita, Russia. Adviser: Prof. Irina P. Glazyrina

Professional experience

- 2019 – present *Full Professor in Computational Economics*, Department of Governance and Technology for Sustainable Development (CSTM), University of Twente, the Netherlands
- 2018-present *Scientific Program Leader*, Dutch national 4TU Resilience program 'DeSIRE' among the 4 Technical Universities (Twente, Delft, Eindhoven and Wageningen), the Netherlands.
- 2017 – present *Full Professor in Computational Economic Modeling*, Research Center 'PERSWADE', University of Technology Sydney, Australia
- 2016 – 2018 *Adjunct Professor*, CSTM, University of Twente, the Netherlands
- 2014 – 2016 *Associate professor*, CSTM, University of Twente, the Netherlands
- 2013 *Honorary Visiting Fellow*, School of Environment & Society, Australian National University, Australia
- 2010 – 2014 *Assistant professor (tenure-track)*, CSTM, University of Twente, the Netherlands
- 2009 – 2015 *Economist on Water & Environment*, [Deltares](http://www.deltares.nl/) Research Institute, the Netherlands
- 2007-2009 *Visiting Researcher*, Dept. of Computational Social Science, George Mason University, USA
- 2006 *Visiting Researcher*, National Institute for Coastal & Marine Management (RIKZ), NL
- 2003 – 2005 *Junior researcher*, Department of Ecological-Economic Modeling, Institute of Natural Resources, Russian Academy of Sciences, Russia
Researcher, NGO Transbaikal Research Centre for Ecological Economics, Russia
- 2001 –2003 *Volunteer researcher*, NGO Transbaikal Research Centre for Ecological Economics, Russia

Honors and awards

My research line was distinguished by the **ERC StG** grant from the European Research Council (2017) and the **VENI** grant from the NWO (2012). Other honorable merits include:

- 2018 *EAERE Award for ERC Grants laureates in the field of environmental and resource economics*, European Association of Environmental and Resource Economists (**EAERE**)
- 2017 *Member of the Social Research Council (Sociaal-Wetenschappelijke Raad of the Royal Netherlands Academy of Arts and Sciences, SWR/KNAW)*
- 2016 *Member of De Jonge Akademie (the Young Academy of the Royal Netherlands Academy of Arts and Sciences, DJA/KNAW)*, <http://www.dejongeakademie.nl/nl/leden/leden/14999>
- 2014 *Early Career Excellence Award*, International Environmental Modelling and Software Society (iEMSs), San Diego, USA
- 2013 *Prof De Winter Prize* for the Best article of the year among female Assistant/Associate professors at the University of Twente ((€2.500) <http://www.utwente.nl/en/newsevents/2013/11/166791/tatiana-filatova-wins-professor-de-winterprijs>)
- 2008 *Commendation for the best paper and presentation* at the 4th Biennial International Congress on Environmental Modelling and Software (iEMSs'08), Barcelona, Spain;

2004 *Best paper and presentation* at the Environmental Economics section, Regional Science Conference, Russian Academy of Sciences & International Academy for Regional Development and Cooperation, Moscow, Russia;

Funding Acquisition and Grant Participation

- 2018 *4TU.Federation Research Program* “High tech for a sustainable future”, long-term strategic research program of the 4 Dutch Technical Universities “Designing Systems for Informed Resilience Engineering” (DeSIRE). Role: PI and Scientific Program Manager (**€4.465.000**).
- 2017 *SESYNC*, The USA National Socio-Environmental Synthesis Center, funding for a consolidating workshop on the “Use of socio-environmental systems modelling in actionable science”. Role: Workshop co-organizer (travel costs for 15 international participants).
- 2017 *ERC Starting Grant*, European Research Council Horizon 2020, project “Scaling up behavior and autonomous adaptation for macro models of climate change damage assessment (SCALAR)”. Role: PI (**€1.500.000**). <https://erc.europa.eu/news/erc-2017-starting-grants-results>
- 2015 University of Twente *Stimuleringsfonds* Role: PI (**€14.100**).
- 2015 ‘*Tech4People*’ Research Advancement Program of the University of Twente, project “Closing the gap between the real world and the lab? Agent technology to extrapolate behavior change in the lab”. Role: PI in the interfaculty consortia (**€150.000**).
- 2014 *NWO Digging into Data* project “Mining Relationships Among variables in large datasets from CompLEx systems” (MIRACLE). Role: PI from the Dutch side in the Canada-USA-UK-Netherlands consortia (**€100.000**). <http://wici.ca/new/research/digging-into-data-did-research/>
- 2012 *EU FP7* “COMPLEX: Knowledge Based Climate Mitigation Systems for a Low Carbon Economy”. Role: UT coordinator (**€1.150.000**) and WP5 Co-PI (€375.000). <http://www.complex.ac.uk/>
- 2012 The Netherlands Organisation for Scientific Research *NWO VENI* grant “Changing climate – changing behavior”. Project web-page: http://www.utwente.nl/mb/cstm/staff/cv/filatova_4-shortdescriptionveni.docx/ Role: PI (**€250.000**).
- 2010 *Global Environmental Facility* (GEF) “Preparation to Climate Change in Africa” - assessing of increasing flood risks due to climate change for Sao Tome Role: co-applicant from Deltares (**\$28 000**).
- 2010 *EU FP7* “Vectors of Change in Oceans and Seas Marine Life, Impact on Economic Sectors”. Impacts of climate change on recreational sector along the Dutch North Sea coast. Project web-site: <http://www.marine-vectors.eu/> Role: co-applicant from Deltares and task leader (**€110.000**).
- 2009 University of Twente *Stimuleringsfonds* Role: PI (**€20.000**).
- 2009 USA NSF program ‘Studies of Coupled Natural and Human Systems’, grant ‘Spatial land-use change and ecological effects: how land management and carbon dynamics interact’, PI Prof. D. Brown and co-PI Dr.D.Parker. Project web-site: <http://masi.cscs.lsa.umich.edu/sluce/> . Role: external adviser.

Memberships and international networks

- 2015-present *Member*, European Association of Environmental and Resource Economists ([EAERE](#))
- 2008-2012 *Secretary* of the International Environmental Modelling and Software Society ([iEMSs](#))
- 2008-2014 *Board Member* of the International Environmental Modelling and Software Society ([iEMSs](#))
- 2009-present *Co-founder* of the Special Interest Group on ‘Socio-Ecological Issues and Sustainable Development’ of the European Social Simulation Association (ESSA), together with Dr. G.Polhill and R.Seidl, www.essa.eu.org/sig/sig-see-spatial-and-ecological-economic-issues/
- 2010 *Member*, Complex Systems Society ([CSS](#)), International Society for Ecological Economics ([ISEE](#))

In addition to my leading role in the iEMSs and ESSA networks, I have been a regular member of: Complex Systems Society ([CSS](#)), European Association of Environmental and Resource Economists ([EAERE](#)), International Society for Ecological Economics ([ISEE](#)).

Short-term international research visits:

- 2014, 2015 *Visitor*, Grantham Research Institute for Climate Change, London School of Economics and Political Science, UK
- 2011-2012 *Visitor*, IIASA International Institute for Applied Systems Analysis, Austria
- 2006 *Visitor*, Gund Institute of Ecological Economics, University of Vermont, USA

Invited talks

- 2019 Invited **keynote talk** at the 22nd *biennial Global Conference of the International Society for Ecological Modelling (ISEM)*, Salzburg, **Austria**, expected 500 participants
- 2019 Invited **plenary talk** at the 23rd *International Congress on Modelling and Simulation (MODSIM'19)*, Canberra, **Australia**, expected 700 participants
- 2019 *BEHAVE Summer School on Agent-Based Modelling for Social Scientists*, Invited lecture, Brescia, **Italy**
- 2019 *Best practices in agent-based modeling for theory development, funded by the Volkswagen Foundation*. Invited talk 'From theories for developing ABMs to ABMs for theory development', Hannover, **Germany**
- 2019 *Institute of Economics, Scuola Superiore Sant'Anna*, Invited talk 'Changing climate – changing behavior: empirical agent based models for climate change economics', Pisa, **Italy**
- 2018 *ZEW Centre for European Economic Research*, Invited talk 'Economic decisions under risks: heterogeneity, interactions and evolving risk perceptions', Mannheim, **Germany**
- 2018 *SESYNC (USA National Socio-Environmental Synthesis Center)*, Annapolis, MD, **USA**
Invited talk 'Complexities in the Anthropocene era models: getting a human actor on board'
- 2018 *Complexity Laboratorium Utrecht*, Utrecht University, **the Netherlands**, Invited talk 'Cities, housing markets and climate change: a complexity perspective'
- 2017 *CSDMS (Community Surface Dynamics Modeling System)*, Workshop leader "Spatial agent-based models: introducing individual interacting actors in environmental models", Boulder, CO, **USA**
- 2017 *Future Earth Cluster*, Co-chair of the panel on "Modelling transitions in economics", Potsdam, **Germany**
- 2017 *Global Land Project meeting*, "Agents in land system theories", Zurich, **Switzerland**
- 2016 *Future Earth Cluster "Linking Earth-System and Socio-Economic Models to Predict and Manage Changes in Land Use And Biodiversity"*, Kyoto, **Japan**
Invited talk 'Scaling up human behavior in models of coupled social-ecological systems'
- 2016 *EAWAG/ETH*, Workshop 'Combining Agent Based Modelling and Survey-Based Choice Experiments', , Zurich, **Switzerland**
Invited talk 'Combining ABM, surveys and lab experiments'
- 2016 *Future Earth Cluster "Linking Earth-System and Socio-Economic Models to Predict and Manage Changes in Land Use And Biodiversity"*, Aix-en-Provence, **France**
Invited talk 'Economic Actors in Social-Ecological Systems: What can ABM offer?'
- 2015 *University of Hamburg*, Research Unit Sustainability and Global Change, Hamburg, **Germany**
Invited talk 'Changing climate – changing behavior: integrating adaptive economic dynamics in coupled socio-environmental systems'
- 2014 *Stockholm Resilience Center*, Stockholm, **Sweden**
Invited talk 'Structural changes in coupled socio-ecological systems'
- 2013 *Groningen Center for Social Complexity Studies*, University of Groningen, **The Netherlands**
Invited talk "Changing climate – changing behavior: flood hazards, risk perception and markets."
- 2013 Leibniz Institute for Agricultural Development in Central and Eastern Europe (*IAMO*), Halle, **Germany**.
Invited lecture "Agent-based land markets: methods, challenges and perspectives" at the Workshop Agent-based modeling in agricultural and resource economics"
- 2013 *Wageningen University & Research centre*, **the Netherlands**
Invited talk "[Changing climate – changing behavior :Modeling abrupt structural shifts in complex socio-environmental systems from the bottom-up](#)" at the Workshop "Validation of Agent-based Land Use Models"
- 2013 Institute of Environmental Systems Research, *University of Osnabrueck*, Osnabrueck, **Germany**
Invited lecture "Behavioral changes and abrupt structural shifts in complex socio-environmental systems"
- 2011 *CEMAGREF & CIRAD*, Workshop "Resilience, Water and Foresight", Montpellier, **France**.
Invited talk 'Agent based modeling of flood prone area: changes in coastal land markets in response to increasing risks'
- 2010 *GREQAM (Groupement de Recherche en Economie Quantitative d'Aix Marseille)*, Marseille, **France**
Invited lecture "Land markets: heterogeneous agents trading heterogeneous goods"
- 2009 *ESSA*, 6th European Social Simulation Association Conference, University of Surrey, Guildford, **UK**
Keynote talk "Why does individual risk perception matter in land use modeling? Combining survey data and agent-based land market model"

- 2009 *Universita Ca' Foscari di Venezia, Venice, Italy*
Lecture at the winter school 'Systems Analysis and Integrated Modeling in Climate Change Research'
- 2007 *Ohio State University, Columbus, USA*
Guest lecture for the class 'Economic and Social Geography' at the Department of Geography

Editorial work

- 2018 – present *Associate Editor, Environmental Modelling & Software (EMS), Elsevier*
- 2017 – present *Editorial Board Member, Socio-Environmental Systems Modelling (SESMO), Golden OA journal*
- 2014 – 2017 *Editorial Board Member, Environmental Modelling & Software (EMS) (Elsevier)*
- 2013- 2015 *Guest Editor of the special issue on "Modelling systemic change in coupled socio-environmental systems (SES)" together with Gary Polhill (The James Hutton Institute, UK) and Maja Schlüter (Stockholm Resilience Center, Sweden). Environmental Modelling & Software journal (Elsevier)*
- 2011-2012 *Guest Editor of the special issue on "Spatial agent-based models for socio-ecological systems" together with D.C. Parker (University of Waterloo, Canada), P.H. Verburg (VU, NL), and C.A. Stannard (The James Hutton Institute, UK). Environmental Modelling & Software journal.*

Refereed journal articles

In addition to the listed journal articles, the full list of peer-reviewed publications includes 8 book chapters, 6 reports and 73 conference abstracts and papers.

Google scholar profile: <http://scholar.google.com/citations?user=FqSmC1cAAAAJ>

Scopus profile: <http://www.scopus.com/authid/detail.url?authorId=25640733600>

Hirsch index 22 (Google Scholar) / **18** (Scopus)

1. De Koning, K., T. Filatova and O. Bin (2019). Capitalization of Flood Insurance and Risk Perceptions in Housing Prices: An Empirical Agent-Based Model Approach. **Southern Economic Journal**, 85 (4), <https://doi.org/10.1002/soej.12328>
2. Mehvar, S., T. Filatova, A. Dastgheib, M. Hossain Sarker, R. Ranasinghe (2019). Climate Change-driven Losses in Ecosystem Services of Coastal Wetlands: a case study in the West coast of Bangladesh. **Ocean and Coastal Management** (169), p. 273-283. <https://doi.org/10.1016/j.ocecoaman.2018.12.009>
3. Handayani, K., T. Filatova and Y. Krozer (2019). From fossil fuels to renewables: An analysis of long-term scenarios considering technological learning. **Energy Policy** (127), p134-146, <https://doi.org/10.1016/j.enpol.2018.11.045>
4. Ghaffarian, S., N. Kerle and T. Filatova (2018). Remote sensing-based proxies for urban disaster risk management and resilience: a review. **Remote Sensing**, 10(11), 1760, <https://doi.org/10.3390/rs10111760>
5. Meyfroidt, P., Chowdhury, R., De Bremond, A., Ellis, E.C., Erb, K.-H., Filatova, T., Garrett, R.D., Grove, J.M., Heinemann, A., Kuemmerle, T., Kull, C.A., Lambin, E.F., Landon, Y., le Polain de Waroux, Y., Messerli, P., Müller, D., Nielsen, J., Peterson, G.D., Rodriguez García, V., Schlüter, M., Turner II, B. L., Verburg, P.H. (2018) 'Middle-range theories of land system change'. **Global Environmental Change** (53), p 52-67, <https://doi.org/10.1016/j.gloenvcha.2018.08.006>
6. Muelder, H. and T. Filatova (2018) 'One Theory - Many Formalizations: Testing Different Code Implementations of the Theory of Planned Behaviour in Energy Agent-Based Models'. **Journal of Artificial Societies and Social Simulation** 21 (4) 5, <http://jasss.soc.surrey.ac.uk/21/4/5.html>
7. Mehvar, S., Filatova, T., Syukri, I., Dastgheib, A., Ranasinghe, R. (2018) 'Developing a framework to quantify potential Sea level rise-driven environmental losses: A case study in Semarang coastal area, Indonesia', **Environmental Science and Policy** (89), pp. 216-230 <https://doi.org/10.1016/j.envsci.2018.06.019>
8. Niamir, L., T. Filatova, A. Voinov, H. Bressers (2018) 'Transition to Low-carbon Economy: Assessing Cumulative Impacts of Individual Behavioral Changes', **Energy Policy** 118, pp 325-345 <https://doi.org/10.1016/j.enpol.2018.03.045>
9. Abdulkareem S.A., E.-W. Augustijn, Y.T. Mustafa and T. Filatova (2018) 'Intelligent judgements over health risks in a spatial agent-based model', **International Journal of Health Geographics** 17(8), <https://doi.org/10.1186/s12942-018-0128-x>
10. Mehvar S., T. Filatova, A. Dastgheib, E. de Ruyter van Steveninck, R. Ranasinghe (2018) 'Quantifying Economic Value of Coastal Ecosystem Services: A Review', **Journal of Marine Science and Engineering**, 6(1), 5; <http://www.mdpi.com/2077-1312/6/1/5/html>

11. Handayani K., Y.Krozer and *T.Filatova* (2017) "Trade-offs Between Electrification and Climate Change Mitigation: An Analysis of the Java-Bali Power System in Indonesia", **Applied Energy**, 208, pp 1020-1037 <http://www.sciencedirect.com/science/article/pii/S0306261917313314>
12. de Koning, K., *Filatova, T.* & Bin, O. (2017) 'Bridging the Gap Between Revealed and Stated Preferences in Flood-prone Housing Markets', **Ecological Economics** (136), pp 1–13, <http://www.sciencedirect.com/science/article/pii/S0921800916308278>
13. de Koning, K., *Filatova, T.* & Bin, O. (2016) 'Improved Methods for Predicting Property Prices in Hazard Prone Dynamic Markets', **Environmental and Resource Economics**, October 26, pp 1–17, <http://link.springer.com/article/10.1007/s10640-016-0076-5>
14. *Filatova, T.*, J.G. Polhill, S. van Ewijk (2016) 'Regime shifts in coupled socio-environmental systems: Review of modelling challenges and approaches'. **Environmental Modelling & Software**, 75, p. 333–347, <http://www.sciencedirect.com/science/article/pii/S1364815215001127>
15. Polhill, J.G., *T.Filatova*, M.Schlüter, A.Voinov (2016) 'Modelling systemic change in coupled socio-environmental systems', **Environmental Modelling & Software**, 75, p. 318–332, <http://www.sciencedirect.com/science/article/pii/S136481521530075X>
16. Ermolieva T., *T. Filatova*, Y. Ermoliev, M. Obersteiner, K. M. de Bruijn and A. Jeuken (2016) 'Flood Catastrophe Model for Designing Optimal Flood Insurance Program: Estimating Location-Specific Premiums in the Netherlands', **Risk Analysis**, March 2016, <http://onlinelibrary.wiley.com/wol1/doi/10.1111/risa.12589/full>
17. Hasselmann, K., R. Cremades, *T.Filatova*, R. Hewitt, C. Jaeger, D. Kovalevsky, A.Voinov, N. Winder (2015). 'Free-riders to forerunners' , **Nature Geoscience** 8, 895–898, <http://www.nature.com/ngeo/journal/v8/n12/full/ngeo2593.html>
18. Lee J.-S., *T. Filatova*, A. Ligmann-Zielinska, B. Hassani-Mahmooei, F. Stonedahl, I. Lorscheid, A. Voinov, J.G. Polhill, Z. Sun, and D.C. Parker (2015), 'The Complexities of Agent-Based Modeling Output Analysis', **Journal of Artificial Societies and Social Simulation**. 18(4): p. 31. Available online: <http://jasss.soc.surrey.ac.uk/18/4/4.html>
19. van Duinen, R., *T. Filatova*, W. Jager and A. van der Veen (2015). "Going beyond perfect rationality: drought risk, economic choices and the influence of social networks." **The Annals of Regional Science**, October 2015. p1-35, <http://link.springer.com/article/10.1007/s00168-015-0699-4/fulltext.html>
20. Elsworth, S., Guillaume, J.H.A., *Filatova, T.*, Rook, J., Jakeman, A.J. (2015). A methodology for eliciting, representing, and analysing stakeholder knowledge for decision making on complex socio-ecological systems: From cognitive maps to agent-based models. **Journal of Environmental Management**, 151 pp. 500 – 516, <http://www.sciencedirect.com/science/article/pii/S0301479714005696>
21. Husby, T., Groot, H. de, Hofkes, M. and *Filatova, T.* (2015). 'Flood Protection and Endogenous Sorting of Households: the Role of Credit Constraints'. Special Issue 'Decision Making on Adaptation to Climate Change', **Mitigation and Adaptation Strategies for Global Change**, August 2015, <http://link.springer.com/article/10.1007%2Fs11027-015-9667-7>
22. van Duinen, R., *T.Filatova*, A. van der Veen, and P. Geurts (2015) "Empirical analysis of farmers' drought risk perception: objective factors, personal circumstances and social influence", **Risk Analysis**, (35): 4, p. 741–755, <http://onlinelibrary.wiley.com/doi/10.1111/risa.12299/abstract>
23. van Duinen, R., *T.Filatova*, A. van der Veen, and P. Geurts (2015) "Coping with drought risk: empirical analysis of farmers' drought adaptation in the southwest Netherlands", **Regional Environmental Change**, 15(6), p 1081-1093, <http://link.springer.com/article/10.1007%2Fs10113-014-0692-y>
24. *Filatova, T.* (2015) "Empirical agent-based land market: Integrating adaptive economic behavior in urban land-use models", **Computers, Environment and Urban Systems**, 54, p.397–413, <http://www.sciencedirect.com/science/article/pii/S0198971514000714>
25. *Filatova, T.* (2014) "Market-based instruments for flood risk management: a review of theory, practice and perspectives for climate adaptation policy", **Environmental Science & Policy**. Volume 37, March 2014, p 227–242, <http://www.sciencedirect.com/science/article/pii/S1462901113001822>
26. Sun,S., D.C. Parker, Q.Huang, *T.Filatova*, D.T. Robinson, R.Riolo, M.Hutchinson, and D. G. Brown (2014) "Market Impacts on Land-Use Change: An Agent-Based Experiment", **Annals of the Association of American Geographers**. 104:3, p 460-484, <http://dx.doi.org/10.1080/00045608.2014.892338>
27. Voinov A., *T. Filatova* (2014) "Pricing strategies in inelastic energy markets: can we use less if we can't extract more?" **Frontiers in Earth Science**, March 2014, Volume 8, Issue 1, pp 3-17, <http://link.springer.com/article/10.1007%2Fs11707-013-0410-y>
28. Huang, Q., Parker, D., *Filatova, T.*, & Sun, S. (2014) "A review of urban residential choice models using agent-based modeling". **Environment and Planning B**, 41(4), 661 – 689. doi:10.1068/b120043p, <http://www.envplan.com/abstract.cgi?id=b120043p>
29. Huang, Q., D.C. Parker, S.Sun, and *T. Filatova* (2013). "Effects of agent heterogeneity in the presence of a land-market: a systematic test in an agent-based laboratory", **Computers, Environment and**

- Urban Systems**, 41, pp. 188 – 203,
<http://www.sciencedirect.com/science/article/pii/S0198971513000616>
30. *Filatova T.*, P.H. Verburg, D.C. Parker, C.A. Stannard (2013). “Spatial agent-based models for socio-ecological systems: challenges and prospects”, **Environmental Modelling & Software**, Volume 45, p. 1-7 <http://www.sciencedirect.com/science/article/pii/S1364815213000807>
 31. Robinson, D.T. S. Sun, M. Hutchins, R. Riolo, D.G. Brown, D.C. Parker, *T. Filatova*, W.S. Currie, S. Kiger (2013) “Effects of land markets and land management on ecosystem function: A framework for modelling exurban land-change”, **Environmental Modelling & Software**, Volume 45, p. 129–140 <http://www.sciencedirect.com/science/article/pii/S1364815212002010>
 32. Katsanevakis S., V. Stelzenmüller, A. South, T. Kirk Sørensen, P. J.S. Jones, S. Kerr, F. Badalamenti, C. Anagnostou, P. Breen, G. Chust, G. D’Anna, M. Duijn, *T. Filatova*, et al (2011) Ecosystem-based marine spatial management: Review of concepts, policies, tools, and critical issues. **Ocean and Coastal Management**, Vol. 54; 807-820, <http://dx.doi.org/10.1016/j.ocecoaman.2011.09.002>
 33. *Filatova T.*, D.C. Parker, A. van der Veen (2011) “The Implications of Skewed Risk Perception for a Dutch Coastal Land Market: Insights from an Agent-Based Computational Economics Model”, **Agricultural and Resource Economics Review**, 40(3), p405-423, <http://purl.umn.edu/120639>
 34. *Filatova T.*, J. Mulder, A. van der Veen (2011) “Coastal risk management: how to motivate individual economic decisions to lower flood risk?”, **Ocean and Coastal Management**, 54 (2), 164-172 <http://dx.doi.org/10.1016/j.ocecoaman.2010.10.028>
 35. *Filatova T.*, A. van der Veen, A. Voinov (2011) “An Agent-Based Model for Exploring Land Market Mechanisms for Coastal Zone Management”, **Environmental Modelling and Software**, 26 179-190 <http://dx.doi.org/10.1016/j.envsoft.2010.08.001>
 36. *Filatova T.*, A. van der Veen, D. C. Parker (2009) “Land market interactions between heterogeneous agents in a heterogeneous landscape—tracing the macro-scale effects of individual trade-offs between environmental amenities and disamenities”, **Canadian Journal of Agricultural Economics** 57(4), 431-459 <http://dx.doi.org/10.1111/j.1744-7976.2009.01164.x>
 37. *Filatova T.*, D. C. Parker, and A. van der Veen (2009) “Agent-Based Urban Land Markets: Agent’s Pricing Behavior, Land Prices and Urban Land Use Change”, **Journal of Artificial Societies and Social Simulation**, 12 (1). Available online: <http://jasss.soc.surrey.ac.uk/12/1/3.html>
 38. Parker D.C. and *T. Filatova* (2008) “A conceptual design for a bilateral agent-based land market with heterogeneous economic agents”, **Computers, Environment and Urban Systems**, 32, 454–463 <http://dx.doi.org/10.1016/j.compenvurbsys.2008.09.012>
 39. Glazyrina I.P. and *T. Filatova* (2004) “Ecological footprint as an indicator of the quality of growth”, **Environmental Economics**, 2, 60-76 (in Russian).

Teaching

2013	University Teaching Qualification (UTQ/BKO)
Courses taught	
2018-present	At the University of Twente (UT), the Netherlands: MSc “Economic Methods of Sustainability Assessment” MSc “Multi agent systems” BSc Module 2 “Strategy, management and economics” BSc Module 7 “Integrated area development” Guest lecture in BSc Module 4 “Europe in Crisis”
2018	University of Technology Sydney (UTS), Australia: Agent-based modeling module on behavioral change and climate mitigation in cities within the MSc “Methods for Energy Analysis” and MSc “Energy Demand Analysis and Forecasting”
2017	BSc Module 7 “Integrated area development”, UT, the Netherlands
2015-2017	Joint MSc course “Resilient Cities in a Changing World” between UT and Stevens Institute of Technology, NJ, USA
2015	Lecturer, PhD Summer school of the European Social Simulation Association, Wageningen, Netherlands
2014-2017	BSc Module 6 ‘Sustainability and Civil Engineering’, UT
2011-2017	MSc “Economic Methods of Sustainability Assessment”, UT
2010-2012	BSc team coach, “Sustainable development in developing countries”, UT
2010	Co-teaching BSc course “European Economic Integration”, UT

2005 - 2006	Co-teaching on MSc lectures “Cost-benefit analysis for water resource management policy”, UT
2003 – 2005	Teaching Assistant, MSc “Informational systems in economics”, State Technical University, Chita, Russia

Supervision of BSc students:

1. *Hannah Mülder* (2016) ‘Understanding the impact of barriers on energy saving decisions of households’. My role: 1st supervisor;
2. *Marie Helen Ferdelman* (2016) ‘The Development of Public Opinion in Post-Disaster Reconstruction Projects. A comparative study of Roombeek and Hoboken’. My role: 1st supervisor;
3. *Mathias Quickert* (2016) ‘Citizen participation in post disaster reconstruction projects lessons from Roombeek’. My role: 1st supervisor;
4. *Oliver Klinkhammer* (2016) ‘The role of stakeholder involvement in Post-disaster Reconstruction Projects A comparative study of Roombeek and Hoboken’ My role: 1st supervisor;

Graduate student supervision

I am proud that the research of *my PhD students has received various distinctions and honorary invitations: two Best Presentation awards, a IIASA Young Scientists Summer NWO fellowship, a EU ESPON2020 Travel Grant, a Global Environments Summer Academy fellowship at Oxford, a UT Tech4People Travel Grant, a membership at KNAW Faces of Science and an invitation to serve on an Expert Panel at the 2018 UN Climate Change Conference. My first PostDoc has joined Erasmus University Rotterdam as an Assistant Professor.*

Former and current PhD students:

1. *A. Taberna* (2019-2022) “Cross-Scale Adaptation and Emergence of Resilience in Regional Economic Spatial Agent-Based Models”
2. *B. Noll* (2018-2022) “Exploring the links between behavioral factors, individual climate adaptation decisions and socio-economic resilience through multi-wave surveys”
3. *S. Ghaffarian* (2016-2020) “Socio-economic resilience and post-disaster recovery assessment using remote sensing and spatial economic modeling”, advising together with N.Kerle.
4. *K. Handayani* (2016-2020) ‘Climate Change Mitigation and Adaptation: An Assessment on Indonesian Power Sector’, advising together with Y. Krozer.
5. *S. Mehvar* (2016-2019) “Quantifying the Environmental Losses/Risks in Coastal areas due to Climate Change Impacts” (UNESCO-IHE Institute for Water Education). External adviser together with R. Ranasinghe. *Defended successfully.*
6. *K. de Koning* (2015-2019) ‘Climate Change And Regime Shifts In Flood-Prone Urban Areas: An Agent-Based Approach’, advising together with A. Need. *Defended successfully (Cum Laude).*
7. *L. Niamir* (2014-2018) ‘Agent-based Modelling for Low-carbon Economy: tracing non-marginal changes in energy markets’, advising together with H. Bressers. *Defended successfully.*
8. *S. Abdulkareem* (2014-2019, part-time) ‘Growing spatial and socio-economic dynamics in empirical agent-based models using artificial intelligence algorithms with application to health and flood risks’, advising together with E.-W. Augustijn. *Defended successfully.*
9. *M. Assaduzzaman* (2011-2019, external part-time PhD) ‘Climate change and livelihoods in Bangladesh: Vulnerability and adaptation among coastal fishing communities’, advising together with J.Lovett and F.Coenen.
10. *T. Husby* (2011-2016) ‘Economic impacts of behavioural responses to flood risk: Exploring general equilibrium effects using micro-level insights’ (Vrije Universiteit Amsterdam) External adviser. *Defended successfully.*
11. *R. van Duinen* (2010-2015) ‘The role of individual behavior and social interaction in adaptation of the agricultural sector to resist increasing climate induced drought risk. A bottom-up approach’, advising together with A. van der Veen. *Defended successfully.*
12. *Q.Huang* (2009-2012) ‘Exurban land-cover, land-use, and land-market evolution: Measuring, reviewing and modeling spatial and agent heterogeneity from the bottom up’ (University of Waterloo, Canada). Advising together with D.Parker. *Defended successfully.*

Former PhDs, transferred to other supervisors when on a leave to Sydney:

13. S. Azis (2014-2019, part-time) 'Agribusiness institution model based on community as a climate change adaptation in agriculture', advising together with H. Bressers and G.Ozerol;
14. D. Bynoe (2012-2019, part-time) 'Multi-level Governance, Climate Change Adaptation and Agri-environmental Stewardship in a Small Island Developing State', advising together with H. Bressers;

Supervision of MSc students:

1. *Johan de Waard* (2015) Quantifying the impacts of climate-driven flood risk changes and risk perception biases on coastal urban property values: A case study for the North Carolina coastal zone". My role: 1st supervisor.
2. *Meron Belay Tariku* (2014) "Household energy demand in the Netherlands: application of an agent based model to assess the potential of carbon emission reduction". My role: 1st supervisor.
3. *Bereket Negasi Isaac* (2013) "Socio-economic Indicators for Appraising Adaptation Measures for Water Stress". My role: 1st supervisor.
4. *Kelvin Thompson* (2013) "Flood Insurance: Public or Private? On the desirability and feasibility of flood Insurance in the Netherlands". My role: 1st supervisor.
5. *Amy Maduro* (2012) "The implementation of a quality system in 'Water management centrum Nederland' ". My role: 1st supervisor.
6. *Pascal K. de Vries* (2011) "Een onderzoek naar vertogen bij de doelbepaling van de kaderrichtlijn water". My role: 1st supervisor

Academic services and positions of honor

Academic leadership and management services

2017-present	<i>Member of the Scientific Steering Board "Resilience Engineering" 4TU.Federation, representing the research agenda of the three Faculties (BMS, ITC, ET) of the University of Twente within the national Dutch 4TU Platform</i>
2017-2018	<i>Co-chair of the 'Science Policy' group (Tracé Wetenschapsbeleid) within De Jonge Akademie (the Young Academy of the Royal Netherlands Academy of Arts and Sciences, DJA/KNAW)</i>
2016-2017	<i>Co-leader "Resilient societies" research theme, Institute for Innovation and Governance Studies, University of Twente</i>
2016-present	<i>Leader of the thematic group on agent-based modeling and climate change, CSTM Department, University of Twente</i>
2014-2016	<i>Scientific Steering Group member, research theme "Water", Institute for Innovation and Governance Studies, University of Twente, the Netherlands</i>

Grant and Prize committees

2018, 2020	<i>Panel member, Dr A.H. Heineken Prize for Environmental Sciences awarded by KNAW (The Royal Netherlands Academy of Arts and Sciences)</i>
2016, 2017	<i>Expert (remote) reviewer for the ERC Consolidator Grant, EU Commission</i>
2016, 2019	<i>Panel member, NWO VENI committee, the Netherlands</i>
Since 2012	<i>Grant reviewer for national funding agencies: FWO Research Foundation, Flanders, Belgium (2016) CORE research funding initiative of the Luxembourg National Research Fund (2015) Natural Sciences and Engineering Research Council of Canada, "Discovery Grant" (2014) Federal Ministry of Education and Research in Germany, funding initiative "Interaction between land management, climate change and ecosystem services" (2012)</i>
Since 2012	<i>Grant reviewer for university level funding initiatives: KU Leuven Belgium (2016) University of Twente (2015, 2016) Wageningen University & Research Centre, the Netherlands (2012)</i>

Session (co-) organizer at international conferences

1. 2019: International conference of the society of [Decision Making Under Deep Uncertainty](#) (DMDU'19), Delft, the Netherlands. Co-organizer of the session 'Finding the tipping point - deep uncertainty for resilience in coupled & complex systems' with Dr. T. Comes;

2. 2016: [Conference on Complex Systems](#) (CCS'2016), Amsterdam, The Netherlands, Co-organizer of the Satellite Session 'The Anthropogenic Earth System: Modeling Social Systems, Landscapes, and Urban Dynamics as a Coupled Human-Climate System up to Planetary Scale' with Dr. J.T. Murphy & Dr. M. Zellner;
3. 2016: Eight Biennial Meeting: [International Congress on Environmental Modelling and Software](#) (iEMSs 2016), Toulouse, France

Convener of the Stream A 'Integrated Environmental Modelling: a multidisciplinary approach for innovative applications' with Prof. A. van Griesven and Prof. M. Volk.

Thematic session 'Methods for Visualization and Analysis of High-Dimensional Simulation Model Outputs'
4. 2016: Special session "[Agent-based models for sustainability: exploring social, economic, spatial and environmental dynamics](#)" The 12th Conference of the European Social Simulation Association, 19-23 September, Rome, Italy
5. 2015: Special session 'Social simulations of land, water and energy', The 11th Conference of the European Social Simulation Association, 14-18 September, Groningen, Netherlands
6. 2014: Thematic Workshop on 'Analyzing and synthesizing results from complex socio-ecosystem models with high -dimensional input, parameter and output spaces' at the [7th International Congress on Environmental Modelling and Software](#) (iEMSs 2014), San Diego, USA
7. 2013: Special session on "Adaptive behavior, social interactions and global environmental change: an agent-based perspective", 9th Conference of the European Social Simulation Association (ESSA 2013), Warsaw, Poland
8. 2012: Special session on "Modelling responses to shocks in coupled socio-ecological systems", [6th Biennial Meeting: International Congress on Environmental Modelling and Software \(iEMSs 2012\)](#), Leipzig, Germany
9. 2010: Special session on 'Spatial agent-based models for socio-ecological systems', [Fifth Biennial Meeting: International Congress on Environmental Modelling and Software \(iEMSs 2010\)](#), Ottawa, Canada

Member of scientific conference committee

1. 2018: [Winter Simulation Conference](#), Gothenburg, Sweden
2. 2016: Eight Biennial Meeting: [International Congress on Environmental Modelling and Software](#) (iEMSs 2016), Toulouse, France
3. 2016: [12th Conference of the European Social Simulation Association](#), 19-23 September, Rome, Italy
4. 2015: 11th Conference of the European Social Simulation Association, 14-17 September, 2015, Groningen, Netherlands
5. 2013: [9th Conference of the European Social Simulation Association](#), Warsaw, Poland
6. 2012: of the Track "Applications in Social Science and Organization" at the [Winter Simulation Conference](#), Berlin, Germany
7. 2012: [4th World Congress on Social Simulations](#), Taipei, Taiwan
8. 2012: [8th Conference of the European Social Simulation Association](#), Salzburg, Austria
9. 2011: [7th Conference of the European Social Simulation Association](#), Montpellier, France

Member of the organizing committee

1. 2019: 4TU Conference on Resilience, University of Twente, the Netherlands
2. 2018: US NSF SESYNC Workshop on 'Use of socio-environmental systems modelling in actionable science: State-of-the-art, Open Challenges and Opportunities', The National Socio-Environmental Synthesis Center, Annapolis, MD, USA
3. 2009: International workshop "Agent-based models of land markets", Macaulay Institute, Aberdeen, UK
4. 2003: International Conference "Economic Development and the Environment: information, modelling and management" held by the Russian Society of Ecological Economics, Baikal, Russia

Invited reviewer for book proposals

Cambridge University Press (Restructuring of a journal, advice elicitation)
Elsevier (Book review advice before publication)

Reviewer for journals:

Global Environmental Change	Ecological Economics
Environmental and Resource Economics	Risk Analysis
Journal of Environmental Management	Economic Modeling
Environment and Planning B: Planning and Design	Environmental Modeling & Software
Journal of Artificial Societies and Social Simulation	Computers, Environment and Urban Systems
Landscape Ecology	Ecological Informatics
Physica A	Advances in Complex Systems
Ecological Modeling	Journal of Environmental Psychology
Stochastic Environmental Research and Risk Asses.	Land Use Policy
Ecology & Society	PloS One

Languages:

English – fluent

Russian – native

Dutch – B2-C1