THE SOCIETY FOR Decision Making under Deep Uncertainty

Newsletter

August 2017 Issue 8

http://www.deepuncertainty.org/ #deepuncertainty

OUR MISSION

The Society for Decision Under Deep Making Uncertainty is a multidisciplinary association of professionals working to improve processes, methods, and tools for decision making under deep uncertainty, facilitate their use in practice, and foster effective and responsible decision making in our rapidly changing world. While we share interests with other societies, ours is unique in its focus on developing, disseminating, and using these new approaches.

Welcome to the newsletter of the Society for Decision Making Under Deep Uncertainty Issue 8, August 2017

- Through this newsletter we aim to provide members with a regular update on news of interest to the society, which includes forthcoming conferences, workshops and other events, recent publications of interest, and opportunities for working together and collaboration.
- We ask members to supply us with any news they want circulating among our community.
- We aim to circulate newsletters as-and-when there is sufficient news to disseminate, which means a likely frequency of one newsletter every few months or so, but more frequently if necessary.
- The newsletter is brought to you by the Communication & Outreach Team (Kim Smet, James Derbyshire, Edoardo Borgomeo, Marjolijn Haasnoot).

Quick link to ('In this issue'):

2017 DMDU Annual Meeting; Other conferences and workshops; Recent events; PhD Opportunities; New paper? Blog? Share something with DMDU members?

2017 DMDU Annual Meeting

Next annual DMDU meeting: save the date 13th to 15th of November

Please save the date for the 2017 DMDU Workshop. The workshop will be hosted by the Oxford Martin School at the University of Oxford, UK, on 14-15 November 2017, with a training day on DMDU methodologies scheduled for 13 November 2017.

The 2017 workshop theme is dealing with deep uncertainty in decision making across multiple scales. The workshop will tackle the challenges of decision making at many different

Page 2News from the Society for Decision Making Under Deep Uncertainty

scales, from the perspective of deep uncertainty. The theme of multiple scales embraces spatial scales, temporal scales and scales of governance.

Registration If you intend to take part in the 2017 DMDU workshop and/or training day please register your interest <u>here</u>.

Abstract submission for the annual meeting is now closed.

Key dates:

31 August:Discussion session panellists, logistics & workshop content confirmed13 November:DMDU training day14-15 November:2017 DMDU workshop

Other Conferences & Workshops

CRUISSE – Challenging Radical Uncertainty in Science, Society and the Environment, first network conference September 21st & 22nd 2017, University College London, UK. For further details see http://cruisse.ac.uk/

AGU Annual Meeting: December 2017 in New Orleans

For those planning to attend AGU 2017, <u>here</u> is an overview of sessions at AGU related to (hydrologic) uncertainty in its various forms.

<u>Session H133</u>, organised by Joe Kasprzyk (University of Colorado at Boulder, USA) and Jon Herman (University of California Davis, USA), is particularly recommended for DMDU members. Submissions to any of these sessions are warmly invited, with abstracts due 2nd August.

Recent events

European Geosciences Union (EGU) General Assembly

DMDU members (a.o. Jan Kwakkel (Delft University of Technology, the Netherlands), Patrick Reed (Cornell University, USA), Andrea Castelleti (Politecnico di Milano, Italy) and Julien Harou (The University of Manchester, UK) organised a session at EGU General Assembly 2017 in Vienna, entitled 'Water Resources Management and Policy in a Changing World'.

Several interesting DMDU approaches were addressed. For example: Simon Langan (IIASA, Austria) presented results of scenarios and models to support robust and adaptive solutions to water security. Jan Kwakkel showed how applying scenario discovery for different time slices can be used to generate adaptation pathways as a follow-up of his <u>paper</u> in Environmental Modelling and Software. Fillip Babovic (Imperial College London, UK) presented a poster on DMDU method for no-regret adaptation in urban areas. Hafsa Ahmed Munia (Aalto University, Finland) presented an analysis of upstream dependencies of transboundary river basins using key thresholds values. More information, including abstracts, can be found <u>here</u>.

European Climate Change Adaptation (ECCA) 2017 conference

The 3rd European Climate Change Adaptation Conference took place in Glasgow from 5-9 June 2017. The theme was 'Our Climate Ready Future', with decision making under deep uncertainty

one of the topics discussed at the conference. Read a selection of blog posts reporting on sessions at ECCA <u>here</u>. In particular, take a look at <u>this article</u>, where Marjolijn Haasnoot (Deltares and Delft University of Technology, the Netherlands) describes some of her own deep uncertainty work.

Sadie McEvoy (Deltares and Delft University of Technology, the Netherlands), Michal Petr (Forest Research, UK) and Marjolijn Haasnoot organized a social meet-up for DMDU members and interested colleagues. About 20 attendees from the UK and Europe, the United States, and Australia met for a happy hour and supper in one of the local cafes. This meet-up was primarily social, but attendees discussed current/future research and projects related to DMDU, as well as plans for attending the annual DMDU workshop in Oxford in November. We can recommend organizing such events at future conferences where DMDU members will be participating. A social meet-up was a relaxed way to network with colleagues and to share experiences from an interesting conference.

The Society for Risk Analysis - Europe (SRA-E) 2017 Conference

The 26th annual conference of the Society for Risk Analysis - Europe took place in Lisbon from 19-21 June 2017. The theme of this conference was: "New challenges, new threats: Resilience and adaptation in a risky world". The conference programme is available <u>here</u>.

DMDU member, Suraje Dessai (University of Leeds, UK) led a symposium on tackling deep uncertainty in the long-term management of flood, drought and coastal risks. The session objective was to explore a fuller range of methodologies and approaches which can be used to address the challenges of environmental risk management in situations involving deep uncertainty.

Suraje presented research that uses qualitative and quantitative approaches to identify robust water management strategies under future climatic and socio-economic uncertainty in the Cauvery River Basin in Karnataka in Southern India. The talk showed that a multi-dimensional approach to addressing uncertainty, combining expert knowledge, observations and model-generated information, can result in decision-relevant knowledge.

Alessio Ciullo (Deltares and Delft University of Technology, the Netherlands) then presented work regarding future research opportunities in flood risk management and proposed a flood risk system meta-model suitable for dealing with deep uncertainties in long-term flood risk management planning. The importance and urgency of extending the range of approaches available to aid decision making under deep uncertainty was evidenced by the enthusiastic debate that followed.

International Public Policy Association - International Conference on Public Policy (ICPP) The 3rd International Conference on Public Policy took place in Singapore from 28-30 June 2017 at the Lee Kuan Yew School of Public Policy, NUS. The conference programme is available <u>here</u>.

Judy Lawrence (Victoria University of Wellington, New Zealand) and Joost Buurman (National University of Singapore) organised a small DMDU network lunch at ICPP on 30 June, 2017. There

Page 4

News from the Society for Decision Making Under Deep Uncertainty

were 15 attendees with backgrounds in water management, public policy, governance, cognitive behavioural psychology, engagement, uncertainty management, health policy, climate change adaptation, extreme events and disaster management, resilience in cities. Those attending were practitioners, academics, PhD students and post docs. Countries represented included, Netherlands (3), New Zealand (4), Singapore (4) Bangladesh (3) and the UK (1). Participants wanted to know more about the Society and the November conference. When asked what they might want from the Society participants suggested:

1. Better access to journal articles once researchers leave their university or organisation.

- 2. Presence of the Society on ResearchGate and a link between LinkedIn and ResearchGate.
- 3. Linkage to common interest projects for proposals for research and contracts.
- 4. Linkages to the Public Policy research networks.
- 5. Move beyond uncertainty analysis to include more focus on implementation issues.

6. Links to policy space and how policy design innovations can be integrated with uncertainty management.

All the attendees were keen to join the Society.

'DMDU Meets Anthropology' Workshop

On July 5 and 6, Marjolijn Haasnoot, Jan Kwakkel, Robert Lempert (RAND, USA) and Steven Popper (RAND, USA), all members of the Society leadership team, attended a workshop in Amsterdam entitled "DMDU Meets Anthropology".

The workshop, facilitated by Arthur Peterson (University College London, UK) and Steve Rayner (University of Oxford, UK), brought together members of the DMDU community with members of the LOST (Law, Organization, Science, and Technology) research network, and organizational scholars studying the crossroads of society, policy, and politics from the University of Amsterdam and University College London.

Participants engaged with the contrasting perspectives of those who aim to facilitate and guide decision making with DMDU analytics and those who study how information is created, transmitted, and understood within organizations. Topics discussed included how quantitative analysis can serve to support and guide narrative stories and the extent to which quantitative decision support assumes that policy debates can be de-politicized vs. serving to inform inherently political debates.

All the participants expressed eagerness for continued discussions, including at the Society's November workshop.

PhD opportunities

Margaret Garcia (Arizona State University, USA) is recruiting two PhD students to join her group at ASU in Spring or Fall 2018 to work on research in the areas of hydrological variability and change, sustainable water management, coupled (socio-hydrological or socio-ecological-technical) systems analysis, and resilient infrastructure systems. Further information can be found <u>here</u>.

New paper? Blog? Share something with DMDU members?

Recent DMDU publications

We collect recent publications related to decision making under deep uncertainties. Since the last newsletter, new publications include those titled:

- Finding pathways to national-scale land-sector sustainability.
- <u>Simulated climate adaptation in stormwater systems: evaluating the efficiency of adaptation strategies.</u>
- <u>Robustness-Optimality Tradeoff for Watershed Load Reduction Decision Making</u> <u>under Deep Uncertainty.</u>
- Direct policy search for robust multi-objective management of deeply uncertain socio-ecological tipping points.
- <u>Uncertainty assessment in ecosystem services analyses: Common challenges</u> and practical responses.
- Avoiding the water-poverty trap: insights from a conceptual human-water dynamical model of coastal Bangladesh.

You can submit your own publication here.

Do you want to share information? Do you want to publicize a report on a meeting, or reflection on some news? The DMDU society has over 200 members worldwide. It is an excellent way to disseminate your research and thoughts.

You can reach us through a variety of channels:

- website: <u>http://www.deepuncertainty.org/</u>
- social media: Facebook, Twitter, LinkedIn
- email to members: <u>deepuncertainty-members@googlegroups.com</u>
- Submit a blog: <u>www.deepuncertainty.org/submit-a-blog</u>
- Submit a paper: <u>www.deepuncertainty.org/submit-a-recent-publication</u>

Thank you for reading the newsletter of the Society for Decision Making Under Deep Uncertainty

