

Workshop

Mapping the Structure and Evolution of Sustainability Science

Date:

December 1, 2010

Data & Workflows

Visualizations

Workshops

Presentations

Visual Insights Talks

Meeting Place:

AAAS Headquarters
Revelle Room (Second Floor)
1200 New York Avenue NW, Room 703
Washington, DC 20005

Photos:



Organizers:



Katy Börner

Victor H. Yngve Professor of Information Science, School of Library and Information Science, Indiana University, Bloomington;
Director, **Cyberinfrastructure for Network Science Center**; Curator, **Places & Spaces: Mapping Science** exhibit,
katy@indiana.edu
[PR^2](#) | [Slides](#)



Luis M. A. Bettencourt

Research Professor, Santa Fe Institute
Research Scientist, Los Alamos National Laboratory
lbett@lanl.gov
[PR^2](#) | [Slides](#)

Workshop Goals & Agenda:

This workshop brings together sustainability science researchers, academic organizations, and agencies with initiatives in the field, well as data modeling, and visualization experts to discuss the development and structure in sustainability science research. Result from an NSF funded large-scale analysis of sustainability research will be presented that map the field in terms of its time evolution, geographic distribution, and disciplinary reach. We will also discuss current research trends and agency initiatives, disciplinary integration, education and policy connections.

Given the diverse backgrounds of the participants and the goals of the workshop, we will start the workshop with brief self-

introductions, followed by two 30 min talks that set the stage for the workshop. The remaining of the workshop comprises of brief presentations and brainstorming and discussion sessions. Both days of this event (Nov. 30th and Dec. 1st) conclude with a working dinner that includes discussion groups covering challenges and opportunities for the field and its many components “from policy to education and research.

Schedule:

Tuesday, November 30, 2010

7:00pm Dinner at the Marriot **Fire and Sage** restaurant
775 12th Street Northwest Washington D.C., 20001
(202) 661-8925
[Directions](#)

Wednesday, December 1, 2010

9:00am Welcome on Behalf of AAAS (Al Teich)

9:05am Workshop Overview by Organizers (Luas M. A. Bettencourt and Katy Katy Börner) [slides](#)

9:15am Introductions by Participants (3 mins. per person/organization)

10:15am *Break*

10:30am Analyzing and Mapping Sustainability Research" Talks (30 mins. each)

- Temporal Evolution and Geography of Sustainability Science & LuÃs M. A. Bettencourt [slides](#)
- Disciplinary Maps of Sustainability Science & Katy Katy Börner [slides](#)

11:30am Sustainability Science Academic Programs (20 min each)

- ASU - Global Institute of Sustainability & Sander van der Leeuw [slides](#)
- Columbia - The Earth Institute & Peter Schlosser [slides](#)
- Harvard - William C. Clark [slides](#)

12:30pm Discussion

1:00pm Lunch

1:30pm "Supporting Sustainability Research" & Talks (20 min each)

- NAS and Sustainability Science & Marina Moses [slides](#)
- NSF and Sustainability Science & Bruce Hamilton [slides](#)

2:30pm "Publishing Sustainability Research" & Talks (15 min each)

- Journals: PNAS & William C. Clark [slides](#)
- Journals: Sustainability & Marc A. Rosen [slides](#)

3:00pm Discussion

3:30pm *Break*

3:45pm Best Ideas - Identify the most promising next steps & Katy Katy Börner

4:45pm General Discussion: Sustainability Science: Quo vadis? “ LuÃs M. A. Bettencourt
Growth, disciplinary integration, education and policy connections

5:30pm *Adjourn*

6:30pm Dinner at **Againn** restaurant
1099 New York Avenue Northwest Washington D.C., DC 20001
(202) 639-9830
[Directions](#)

Participants Attending:



William R. L. Anderegg

Department of Biology, Stanford University
[PR^2](#) | [Slides](#)



Nikoosh Carlo



AAAS Science Policy fellow NSF
PR²



William C. Clark

Professor, Harvard Kennedy School of Government Member of the Editorial Board, *PNAS*
PR² | Slides: [Harvard](#), [PNAS](#)



Ingo Günther

Artist, NYC
PR²



Bruce Hamilton

Program Director, Environmental Sustainability, in the Engineering Directorate, NSF
PR² | [Slides](#)



Kathryn Hughes

Program Officer, Chemical Sciences and Technology at The National Academies, Washington D.C.
PR²



Jasleen Kaur

PhD Student, School of Informatics, Indiana University
PR²



Peter Meisen

President, the GENI Initiative, Global Energy Network Institute
PR²



Marina Moses

Science and Technology for Sustainability Program, Policy and Global Affairs Division, The National Academies
PR²



Marc A. Rosen

Professor, University of Ontario Institute of Technology
PR² | [Slides](#)



Peter Schlosser

Associate Director and Director of Research, The Earth Institute, Columbia University, NY
PR²



Naoki Shibata

Assistant Professor, Institute of Engineering Innovation, The University of Tokyo
[PR^2](#)



Al Teich

Director, Science & Policy Programs, AAAS



Rita Teutonico

Advisor for Integrative Activities, Office of the Assistant Director, Social, Behavioral, and Economic Sciences, National Science Foundation
[PR^2](#)



Stephen Uzzo

VP of Science & Technology, New York Hall of Science
[PR^2](#)



Sander Van Der Leeuw

Professor, Arizona State University
[PR^2](#) | [Slides](#)

Interested But Cannot Attend:



Lynn Davis

Office of Scientific and Technical Information, USDOE



Robert Kates

University of Maine



Pamela A. Matson

Stanford University



Romain Murenzi



University of Maryland, AAAS-Center for Science, Technology, and Sustainable Development



Kasey White

Center for Science, Technology, and Congress, American Association for the Advancement of Science

Travel/Housing:

Room blocks have been set aside for attendees of this workshop at the [Hampton Inn Washington, DC - Convention Center](#)
[Google map](#)

Hotel Address:

901 6th Street. NW

Washington, District of Columbia, USA 20001-2646

Tel: 1-202-842-2500

Map with the four venues: [LINK](#)

Recommended Reading

Simon A. Levin and William C. Clark (Eds.) (2009) [Toward a Science of Sustainability](#). NSF Workshop Report.

[Thomas E. Graedel](#) and [Ester van der Voet](#) (Eds.) [Linkages of Sustainability](#). MIT Press

Directions:

Please contact Beth Works at 812/855.5120 or bworks@indiana.edu to make sure you get the special reservation rate for attending the workshop!

Acknowledgments:

This workshop is co-sponsored by the AAAS Directorate for Science & Policy Programs and supported in part by the National Science Foundation under Grant No. CBET-0831636 and the [Cyberinfrastructure for Network Science Center](#) at Indiana University. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



James S. McDonnell Foundation

