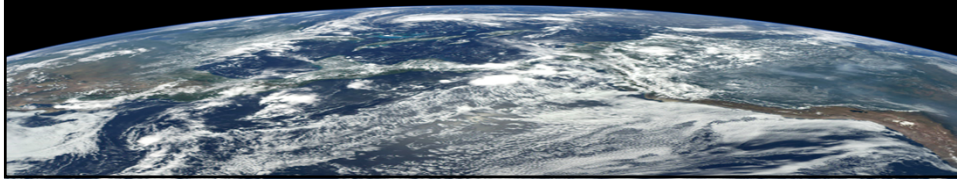


The Information Visualization MOOC Plug-and-Play Macroscopes Mapping Science Exhibit

Katy Börner, Indiana University, USA
Frontiers of Visualization Meeting
Networking and Information Technology R&D (NITRD) Program
May 2, 2014



Information Visualization MOOC



Overview

This course provides an overview about the state of the art in information visualization. It teaches the process of producing effective visualizations that take the needs of users into account.

Among other topics, the course covers:

- Data analysis algorithms that enable extraction of relationships in data
- Major visualization and interaction techniques
- Discussions of systems that drive research and development.

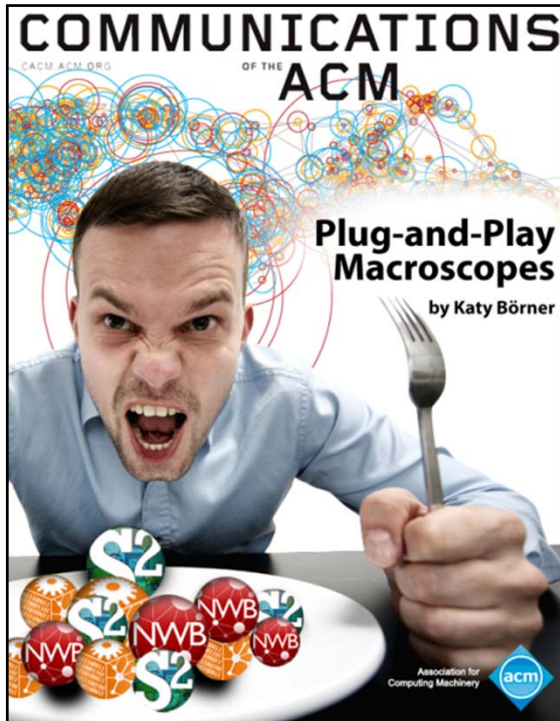
A certificate will be issued upon successful completion. Please watch the introduction video to get better acquainted with the course.

Katy Börner, Ph.D.
Indiana University



Sign Up For The Course

Register for free at <http://ivmoooc.cns.iu.edu>. Class restarted on Jan 28, 2014.



COMMUNICATIONS
OF THE
ACM

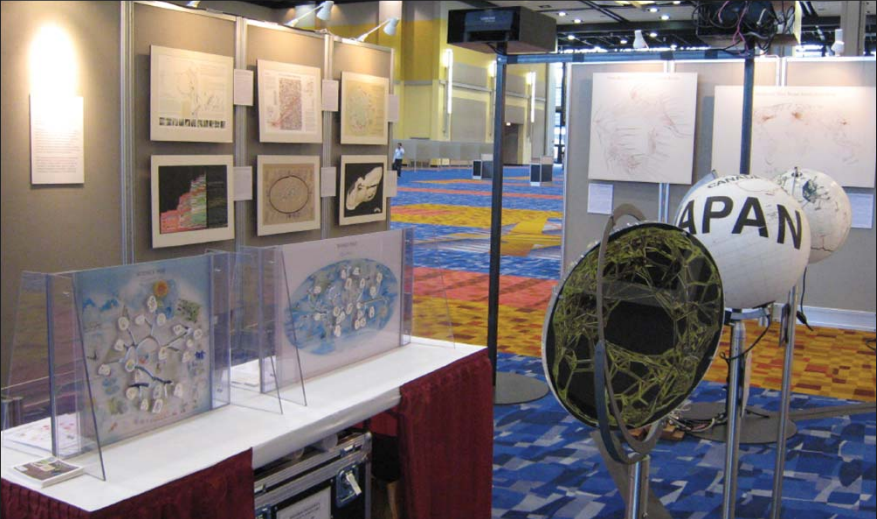
**Plug-and-Play
Macrosopes**
by Katy Börner

Association for
Computing Machinery **acm**

Börner, Katy. (March 2011).
Plug-and-Play Macrosopes.
Communications of the ACM,
54(3), 60-69.

Video and paper are at
<http://www.scivee.tv/node/27704>

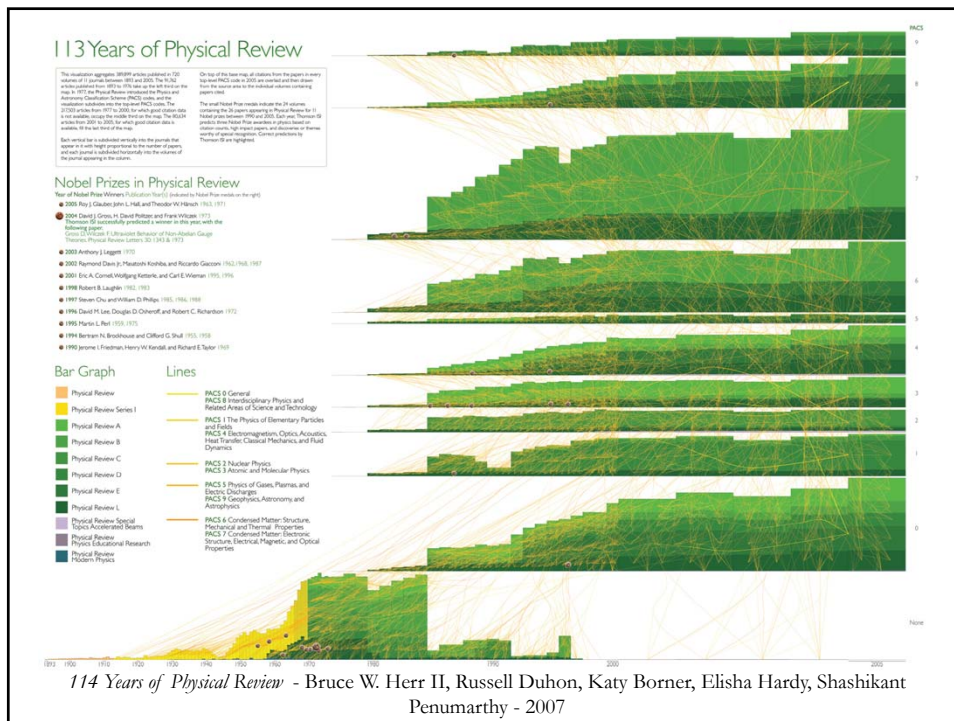
Places & Spaces: Mapping Science Exhibit
<http://scimaps.org>

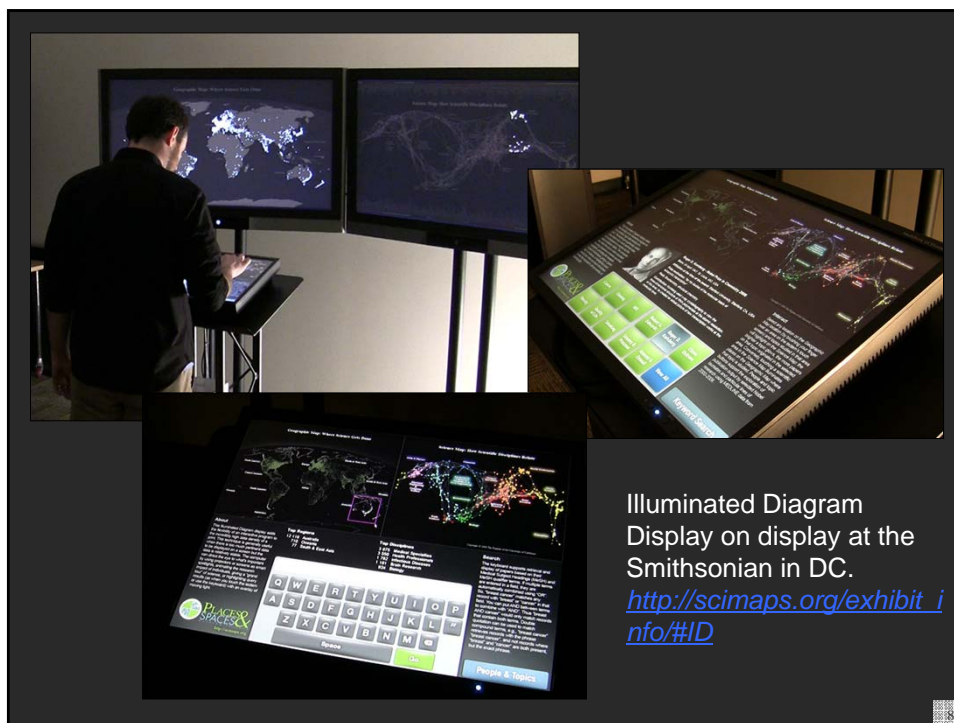
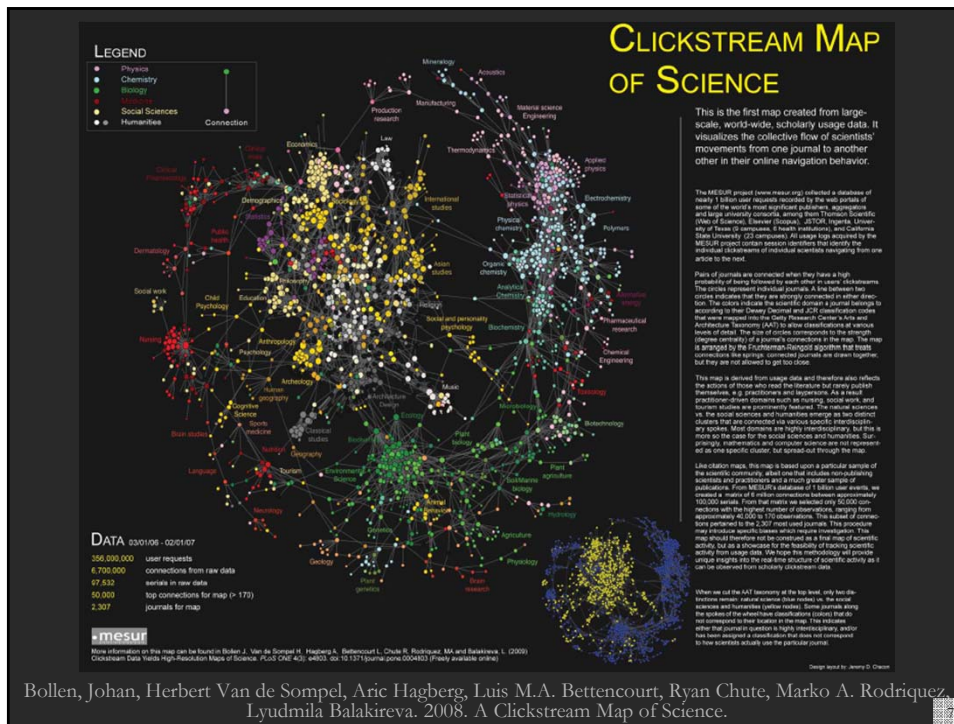


After nine years, there now exist 90 out of 100 maps.



Mapping Science Exhibit at MEDIA X in the Wallenberg Hall, Stanford University
<http://mediax.stanford.edu>





Geographic Map: Where Science Gets Done

North America, Europe, North & East Asia, Oceania, South America, Africa, Australia, Antarctica

Science Map: How Scientific Disciplines Relate

Math & Physics, Chemistry, Health Professionals, Social Sciences, Medicine, Agricultural, Chemical, Mechanical & Civil Engineering, Biotechnology, Infectious Diseases, Brain Research, Humanities, Biology, Earth Sciences

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About

This Illuminated Diagram display adds the flexibility of an interactive program to the incredibly high data density of a print. This technique is generally useful when there is too much pertinent data to be displayed on a screen but the data is relatively stable. The computer can direct the eye to what's important by using projectors or screens as smart spotlights, animating the research impact of individuals, giving a "grand tour" of science, or highlighting query results (as when you touch the lectern or use the keyboard) with an overlay of moving light.

<http://placespaces.org>

Top Five Continents

North America - 4,000 records
 South & East Asia - 3,589
 Australia - 2,431
 Africa - 2,206
 South America - 1,562

Top Five Scientific Disciplines

Math & Physics - 4,000 records
 Health Professionals - 3,589
 Social Sciences - 2,431
 Aeronautical, Chemical, Mechanical & Civil Engineering - 2,208
 Humanities - 1,562

Search

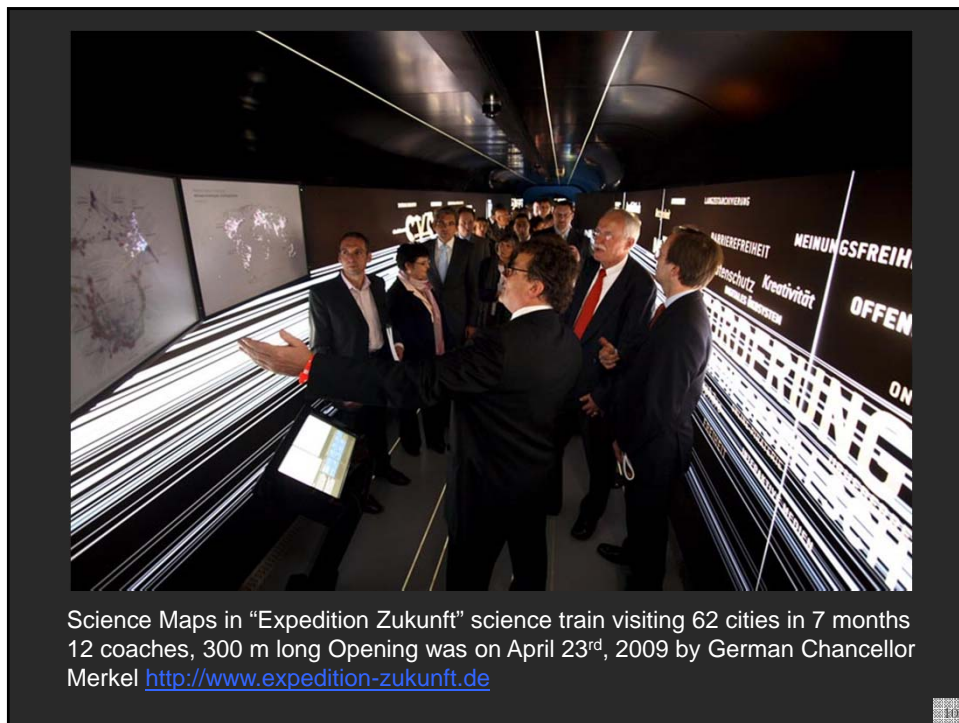
The keyboard supports retrieval and display of papers based on their Medical Subject Headings (MeSH) and MeSH qualifier terms. If multiple terms are entered in a field, they are automatically combined using "OR". So "breast cancer" matches any record with "breast" or "cancer" in that field. You can put AND between terms to combine with "AND". Thus "breast AND cancer" would only match records that contain both terms. Double quotation can be used to match compound terms, e.g. "breast cancer" retrieves records with the phrase "breast cancer", and not records where "breast" and "cancer" are both present, but the exact phrase.

Q	W	E	R	T	Y	U	I	O	P
A	S	D	F	G	H	J	K	L	"
Z	X	C	V	B	N	M			

Space

Go

People & Topics



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All papers, maps, tools, talks, press are linked from <http://cns.iu.edu>

CNS Facebook: <http://www.facebook.com/cnscenter>

Mapping Science Exhibit Facebook: <http://www.facebook.com/mappingscience>

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