

## Visualizing Nanoscience and Technology

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In the information age, the ability to read and make data visualizations is as important as the ability to read and write. This talk explains and exemplifies the power of data visualizations not only to help locate us in physical space but also to help us understand the extent and structure of our collective knowledge, to identify bursts of activity, pathways of ideas, and borders that beg to be crossed. It introduces a theoretical visualization framework meant to empower anyone to systematically render data into insights together with tools that support temporal, geospatial, topical, and network analyses and visualizations. Materials from the Information Visualization MOOC (<http://ivmooc.cns.iu.edu>) and nanoscience and technology maps from the *Places & Spaces: Mapping Science* exhibit (<http://scimaps.org>) will be used to illustrate key concepts and to inspire participants to visualize their very own data.

## References

Börner, Katy. 2015. *Atlas of Knowledge: Anyone Can Map*. Cambridge, MA: The MIT Press.

Börner, Katy, and David E. Polley. 2014. *Visual Insights: A Practical Guide to Making Sense of Data*. Cambridge, MA: The MIT Press.

Börner, Katy. 2010. *Atlas of Science: Visualizing What We Know*. The MIT Press.

## Bio

Katy Börner is the Victor H. Yngve Distinguished Professor of Information Science in the [Department of Information and Library Science](#), [School of Informatics and Computing](#), Adjunct Professor at the Department of Statistics in the College of Arts and Sciences, Core Faculty of [Cognitive Science](#), Member of the [Advanced Visualization Laboratory](#), Founding Director of the [Cyberinfrastructure for Network Science Center](#) at Indiana University, Bloomington, IN, Visiting Professor at the Royal Netherlands Academy of Arts and Sciences (KNAW) in The Netherlands, and Visiting Professor and Mercator Fellow, Department of Computer Science and Applied Cognitive Science, University of Duisburg-Essen, Germany. She is a curator of the international [Places & Spaces: Mapping Science](#) exhibit and the author of the *Atlas of Knowledge* and *Atlas of Science* (MIT Press). She holds a MS in Electrical Engineering from the University of Technology in Leipzig, 1991 and a Ph.D. in Computer Science from the University of Kaiserslautern, 1997. She is a member of ACM and IEEE. In 2012, she became an American Association for the Advancement of Science (AAAS) Fellow.

Pic: [http://info.ils.indiana.edu/~katy/images/katy\\_photos/2013-office.jpg](http://info.ils.indiana.edu/~katy/images/katy_photos/2013-office.jpg)