

Tutorial for NetSci 2012 in Evanston, Illinois, USA

Title: Sci²: A Tool for Science of Science Research and Practice

Instructors: Joseph Biberstine and David Coe of the Cyberinfrastructure for Network Science Center at Indiana University Bloomington (<http://cns.iu.edu>)

Duration: 3 hours (including a 10 minute break) on Tuesday, June 19th from 9 am to 12 noon.

Format: Lecture and “hands-on” training

Audience: This tutorial is designed for researchers, practitioners, program staff from federal agencies and graduate students interested in using advanced analysis algorithms and visualizations in their work to map the structure and dynamics of a domain of science.

Abstract:

The Science of Science Tool (Sci²) (<http://sci2.cns.iu.edu>) was designed for researchers and science policy makers interested in understanding the structure and dynamics of science. It is a standalone desktop application that installs and runs on Windows, Linux, and Mac OS X and supports:

- Reading and writing of 20 major bibliometric file formats (including ISI, Scopus, BibTeX, NSF, EndNote, CSV, Pajek .net, XGMML, GraphML, and more);
- Easy access to over 150 algorithms for the temporal, geospatial, topical, and network analysis and visualization of scholarly datasets at the micro- (individual), meso- (local), and macro- (global) levels; and
- Professional visualization of analysis results by means of large-format charts and maps.

The first half hour of the tutorial introduces the tool. Remaining time will be spent discussing case studies posed by Sci² users and/or tutorial participants (see samples in Sci² Tutorial at <http://sci2.wiki.cns.iu.edu>).

Reference

Börner, Katy. (2010). *Atlas of Science: Visualizing What We Know*. The MIT Press.
(<http://scimaps.org/atlas>)