## **SLIS Faculty News**

## Cognitive Cartography Presented at the Université du Québec



"Minds and Societies - 2008" is the name of the 2nd Summer School of Social Cognition, Institute of Cognitive Services (ISC), Université du Québec à Montréal. It will be held from June 28 to July 6, 2008. As a part of the program, SLIS faculty member, Katy Börner, will present a talk on "Cognitive Cartography" at the The Science of Science lecture - see abstract below. She will also present all four iterations of the *Places & Spaces: Mapping Science* poster exhibit. Each of the iterations has 10 maps. This is the first time for all 40 maps to include a French translation.

Additionally, on July 7th, Börner will present a talk at the National Research Council in Ottawa, Ontario - "Science Maps: How to Analyze, Map, and Make Sense of Science." Her research lab's *Places & Spaces: Mapping Science* exhibit has been at the **National Research Council** since April. The exhibit has been extended at this location throughout the summer.

## **Abstract: Cognitive Cartography**

"Cartographic maps of physical places have guided mankind's explorations for centuries. They enabled the discovery of new worlds while also marking territories inhabited by unknown monsters. Domain maps of abstract semantic spaces, see <a href="http://scimaps.org">http://scimaps.org</a>, aim to serve today's explorers understanding and navigating the world of science. The maps are generated

and navigating the world of science. The maps are generated through scientific analysis of large-scale scholarly datasets in an effort to connect and make sense of the bits and pieces of knowledge they contain. They can be used to objectively identify major research areas, experts, institutions, collections, grants, papers, journals, and ideas in a domain of interest. Local maps provide overviews of a specific area: its homogeneity, import-export factors, and relative speed. They allow one to track the emergence, evolution, and disappearance of topics and help to identify the most promising areas of research. Global maps show the overall structure and evolution of our collective scholarly knowledge. This talk will

present an overview of the techniques and cyber-technologies used to study science by scientific means together with sample science maps and their interpretations."

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