



DYNAMIC SEARCHES AND KNOWLEDGE BUILDING

October 1 – 5, 2007

ORGANIZING COMMITTEE: KARIN VESPOOR, CHAIR (LOS ALAMOS), JENNIFER CHU-CARROLL (IBM), RONALD COIFMAN (YALE), CAREY PRIEBE (JOHNS HOPKINS)

Scientific Overview

This workshop will explore the interactions between *search* and *knowledge*. We are interested in exploring how existing or acquired knowledge – about a user, a domain, or the world – can be used to improve the search for information, and in turn how search can be used to improve knowledge models. We wish to explore mathematical techniques that exploit semantic structures (e.g. description logics, ontologies, or semantic graphs) to drive statistical or logical inference for search query understanding or knowledge building. Topics of interest include: natural language question answering; user-tailored search, textual entailment; knowledge discovery and data mining; analysis and organization of search results; measures of document or semantic similarity; multi-media data mining and semantic annotation including images, video and audio; and applications integrating search and knowledge (e.g. biomedicine, customer relationship management).

Confirmed Speakers (partial list)

Lisa Amini (IBM), **David Blei** (Princeton University), **Tony Davis** (Comcast/StreamSage), **Tina Eliassi-Rad** (Lawrence Livermore National Lab), **Sanda Harabagiu** (Language Computer Corp, University of Texas, Dallas), **Eduard Hovy** (USC/ISI), **Peter Jones**, (Yale University), **Diane Kelly** (University of North Carolina), **Jimmy Lin** (University of Maryland), **Mark Manasse** (Microsoft Corporation), **Mark Meiss** (Indiana University), **Hagit Shatkay**, (Queen's University, Ontario), **Tomek Strzalkowski** (University at Albany), **Karin Verspoor** (Los Alamos National Laboratory), **Bonnie Webber** (University of Edinburgh).

Long Program Schedule

This workshop is part of the long program “Mathematics of Knowledge and Search Engines.”

- Tutorials, September 11-20, 2007
- **Workshop 1: Dynamic Searches and Knowledge Building, October 1 - 5, 2007**
- Workshop 2: Numerical Tools and Fast Algorithms for Massive Data Mining, Search Engines and Applications, October 22 - 26, 2007
- Workshop 3: Social Data Mining and Knowledge Building, November 5 - 9, 2007
- Workshop 4: Search and Knowledge Building for Biological Datasets, November 26 - 30, 2007

Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

www.ipam.ucla.edu/programs/sews1

