



**UCSB Department of Geography**  
**Geography of the Information Society**  
**COLLOQUIUM**

**Date:** Tuesday, March 8, 2011  
**Time:** 3:30-4:30 PM  
**Place:** Buchanan 1940

**Speaker:** **ALEXANDER KLIPPEL**  
Assistant Professor  
Pennsylvania State University  
Department of Geography  
PhD: Computer Science (Informatics), University of Hamburg & University of Bremen, 2003

**Title:** **Human Factors in GIScience**

**Abstract:**

The talk will address the central role that human factors play in the development of spatial information theories and in the development of geo-spatial technologies. A crucial point will be mutually beneficial developments: our increased multidisciplinary knowledge about human factors (including spatial thinking/cognition) allows for changing the design of geo-spatial tools; in return, both the theoretical and technical contributions that GIScience offers open access to resources of the information society and allow for rendering spatial information precise (e.g., to formalize spatial semantics). Besides an overview, the talk will demonstrate this mutually beneficial approach using several examples such as the role of domain semantics in conceptualizing spatio-temporal information, the understanding of core geographic concepts such as Tobler's First Law of Geography, the use and evaluation of visual analytics, and research opportunities offered through volunteered geographic information.

**Brief Bio:**

Dr. Klippel directs the Human Factors in GIScience Lab at Penn State. His work spans a range of topics that address how theories and tools developed in spatial information science are integrated with approaches on human cognition. He has widely published on topics such as standards for cognitively ergonomic route directions, map design and interpretation, volunteered geographic information, the cognitive adequacy of qualitative spatial calculi, core geographic concepts, and spatial language. Dr. Klippel was a founder member of the GIScience group at the University of Melbourne, Australia. He is also the first doctoral student of the SFB/TR-8 Spatial Cognition, Bremen, Germany. His work is recognized through grants from major funding agencies and several best paper awards.

**For more information:** <http://www.cognitivegiscience.psu.edu/>