

**GIO 2014**

**Workshop on Geographic Information  
Observatories 2014**

**Proceedings**

**Vienna, Austria  
September 23, 2014**

**Krzysztof Janowicz, Benjamin Adams, Grant McKenzie, Tomi  
Kauppinen (Eds.)**

## Editors

### **Krzysztof Janowicz**

Department of Geography  
University of California, Santa Barbara  
Santa Barbara, CA, USA  
jano@geog.ucsb.edu

### **Benjamin Adams**

Centre for eResearch  
Department of Computer Science  
The University of Auckland  
Auckland, New Zealand  
b.adams@auckland.ac.nz

### **Grant McKenzie**

Department of Geography  
University of California, Santa Barbara  
Santa Barbara, CA, USA  
grant.mckenzie@geog.ucsb.edu

### **Tomi Kauppinen**

Aalto University School of Science Department of Media Technology Espoo, Finland tomi.kauppinen@aalto.fi	University of Bremen Cognitive Systems Group Bremen, Germany
---	--

## Preface

Geographic Information Observatories is a new workshop series intended to showcase and expand research on exploring the universe of geospatial information from multiple perspectives. The first GIO 2014 workshop was held at the 8<sup>th</sup> International Conference on Geographic Information Science in Vienna, Austria.

Two keynote talks at the workshop highlighted various aspects of information observatories, including the social dynamics of user-generated geographic content and challenges for data interoperability. The first keynote was given by Brent Hecht, assistant professor of computer science at the University of Minnesota, on *the Mining and Application of Diverse Cultural Perspectives in Volunteered Geographic Information and User-Generated Content*. The second keynote on *Post-Normal Geospatial Science* was given by Sven Schade, scientific officer at the European Commission's Joint Research Center.

Already in its first year the workshop attracted 19 participants, more than half PhD students working in GIScience. Six papers were accepted out of ten submissions, including research and position papers. What you will find in this collection is a span of topics investigating both theoretical and practical aspects of geographic information observatories.

September 2014	Benjamin Adams Krzysztof Janowicz Grant McKenzie Tomi Kauppinen (Editors)
----------------	---

## **Program Committee**

Justin Cranshaw, Carnegie Mellon University, USA

Sara Fabrikant, University of Zurich, Switzerland

Mark Gahegan, University of Auckland, New Zealand

Mike Goodchild, University of California, Santa Barbara, USA

Mark Graham, University of Oxford, UK

Brent Hecht, University of Minnesota, USA

Peter Kiefer, ETH Zurich, Switzerland

Peter Mooney, National University of Ireland Maynooth, Ireland

Ross Purves, University of Zurich, Switzerland

Sven Schade, European Commission's JRC, Italy

Simon Scheider, University of Muenster, Germany

Andre Skupin, San Diego State University, USA

Maria Vasardani, University of Melbourne, Australia

# Table of Contents

## Introduction

Towards Geographic Information Observatories	1-5
--	-----

*Krzysztof Janowicz, Benjamin Adams, Grant McKenzie, Tomi Kauppinen*

## Accepted papers

Spatializing a Digital Text Archive about History	6-14
---	------

*Andre Bruggmann, Sara I. Fabrikant*

Exploiting Linked Spatial Data and Granularity Transformations	15-22
--	-------

*Heidelinde Hobel, Andrew U. Frank*

Exploring the geographic information universe: The role of search technologies	23-27
--	-------

*Andrea Ballatore*

Is My Information Private? Geo-Privacy in the World of Social Media	28-31
---	-------

*Bandana Kar, Rina Ghose*

Geographic Information Observatories for Supporting Science	32-39
---	-------

*Benjamin Adams, Mark Gahegan, Prashant Gupta, Richard Hosking*

Five General Properties of Resolution	40-47
---------------------------------------	-------

*Auriol Degbelo and Werner Kuhn*