## Pre-conference workshop of the

20<sup>th</sup> AGILE International Conference on Geographic Information Science 2017

# Bridging space, time, and semantics in GIScience

9 May 2017, Wageningen, The Netherlands



The increased availability of geographic data (often in massive volumes) together with the advances in spatiotemporal data management, integration, analysis, and visualization present an emerging need and opportunity: how to transform these massive volumes of geographic data into meaningful information about places, events, activities, and interrelations. The integration of space, time, and semantics provides the basis to infuse data with meaning and deepen our knowledge of complex natural and social systems and intricate interactions in space and time. This key research issue is also relevant to other cutting edge research themes such as Volunteered Geographic Information, Geospatial Semantic Web, semantic sensor networks, big data, linked data, etc. Context and granularity (spatial, temporal, and semantic) constitute additional dimensions of geographic data that are not fully explored and may provide valuable insights into this issue.

### **Topics of interest:**

The topics of the workshop include, but are not limited to:

• Geospatial semantics

- Ontologies of space, time, processes, and events
- Cognitive aspects of spatiotemporal concepts
- Semantic information extraction
- Sophisticated spatiotemporal models
- Spatial, temporal, and semantic representation of dynamic processes, events, and activities
- Semantics of Geospatial Information from historical maps
- Visualization of space, time, and semantics
- Multidimensional spatial data models for VGI
- Real-time spatiotemporal data integration, modelling, analysis, and visualization (real-time space-time integration)
- State-of-the-art applications in relevant areas such as historical GIS, climate change, transportation, mobility, epidemics, disaster response, etc.

#### Submission

Participants are invited to submit a short paper (2000 to 3000 words) in the <u>AGILE</u> <u>2017 Conference short paper format</u>. Short paper submissions will be reviewed and selected for presentation during the workshop.

Depending on the submissions, publication of selected papers in **a special issue of a journal** will be considered. Further details will be provided at the workshop.

Please make your submission anonymous and submit it as a PDF document via <u>EasyChair</u>.

#### Organizers

The Workshop is co-organised by AGILE and ISPRS Working Groups <u>IV/1 Multi-</u> <u>dimensional modelling</u> and <u>IV/2: Ontologies, Semantics, and Knowledge</u> <u>Representation for Geospatial Information</u>.

#### **Program Committee**

Ken Arroyo Ohori, Delft University of Technology, The Netherlands Jan Blachowski, Wroclaw University of Science and Technology, Poland Pawel Boguslawski, University of the West of England, United Kingdom Christos Chalkias, Harokopio University, Greece Eric Guilbert, Laval University, Canada Umit Isikdag, Mimar Sinan Fine Arts University, Turkey Marinos Kavouras, National Technical University of Athens, Greece Margarita Kokla, National Technical University of Athens, Greece Thomas Kolbe, TU Munich, Germany Hugo Ledoux, TU Delft, The Netherlands Mir Abolfazl Mostafavi, Laval University, Canada Francesca Noardo, Politecnico di Torino, Italy Antonia Spanò, Politecnico di Torino, Italy Stephan Winter, The University of Melbourne, Australia

#### **Important dates**

28 February, 2017: Short paper submission20 March, 2017: Notification of acceptance9 May, 2017: AGILE Workshop "Bridging space, time, and semantics in GIScience"