Proposal for pre-conference workshop – AGILE 2017
Wageningen, Tuesday 9 May 2017

http://www.agile-online.org/index.php/conference/conference-2017

1. Workshop name/title (and acronym is applicable)

Bridging space, time, and semantics in GIScience

2. Description of the workshop by listing topic(s), objective(s) and planned outcome(s)

2.1 Topic(s)

- 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
- 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)
- Semantics of geospatial information from historical maps
- State-of-the-art applications in relevant areas such as climate change, transportation, mobility, epidemics, disaster response, etc.

2.2 Objective(s)

The main objectives of the proposed Workshop are:

- to promote research and stimulate fruitful discussions between researchers whose research topics intersect at this cutting-edge theme
- to foster collaboration among AGILE and ISPRS members (based also on the memorandum of understanding between ISPRS and AGILE)
2.3 **Planned outcome(s)**

An outcome can be e.g. the publication of a report, a special issue of an International Journal, a white paper, a book, etc. If you already know the publisher, please provide this information as well.

The Workshop organizers intent to explore different possibilities for publication of the papers / outcomes. One prevailing possibility is to publish the proceedings (or selected papers) of the Workshop in the ISPRS Archives or Annals. Another option is the publishing of selected papers in special issues of journals in this scientific area.

3. **Abstract**

This is how you want your workshop to be presented on the conference webpages (maximum 1000 characters)

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 may provide the basis to infuse data with meaning and deepen our knowledge of elaborate 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.

4. **Short description of the intended length (half or full day) and the format of the workshop**

A full day Workshop is foreseen, organized in a dynamic and interactive manner to facilitate discussions and exchange of ideas.

5. **Brief statement of the relevance of the workshop for AGILE**

The theme of the Workshop lies at the intersection of several key research issues in GIScience, such as geospatial semantics and ontologies, spatiotemporal modelling, big spatial data, VGI, data mining and knowledge discovery.
6. **What is the approximate number of expected participants?**

**Approximately 15 participants**

7. **Names and e-mail addresses of the organizing member(s)**

**Leading AGILE member (or sponsor) and contact person:**

School of Rural and Surveying Engineering, National Technical University of Athens  
Contact person: Margarita Kokla (mkokla@survey.ntua.gr)

**Contributing AGILE members (including the persons involved) – at least one seconding AGILE member is needed:**

Department of Geography, Harokopio University  
Contact person: Christos Chalkias (xalkias@hua.gr)

**Contributing non-AGILE members (including the persons involved) – if applicable:**

- ISPRS WG IV/1 Multi-dimensional modelling, Contact person: Eric Guilbert (eric.guilbert@scg.ulaval.ca)
- ISPRS WG IV/2: Ontologies, Semantics, and Knowledge Representation for Geospatial Information, Contact persons: Margarita Kokla (mkokla@survey.ntua.gr)  
  Mir Abolfazl Mostafavi (Mir-Abolfazl.Mostafavi@scg.ulaval.ca)  
  Department of Geomatics Science, Laval University, Contact persons: Mir Abolfazl Mostafavi (Mir-Abolfazl.Mostafavi@scg.ulaval.ca), Eric Guilbert (eric.guilbert@scg.ulaval.ca)

**Organizing Committee (if applicable):**

**Programme Committee (if applicable):**

8. **Additional information about previous workshops, if held.**

9. **Expected resources needed**

*Explain here if you have any special needs (e.g. internet connection, break-out room(s), etc.), what are the expected resources needed. Please take into account that the fee for the workshop (1 day) is fixed at 50€ and this should cover the basic expenses made (coffee breaks, ...). If you need additional support, this request should be directed towards the AGILE Council, but this support cannot be guaranteed.*

- Internet connection
- Projector
10. Other information

Submission by e-mail to: Agile2017@wur.nl