

## Programme committee

- Roland Billen, Université de Liège, Belgium
- Michael Batty, University College of London, United Kingdom
- Mireille Batton-Hubert, Ecole Nationale Supérieure des Mines de Saint-Etienne, France
- Carlos Borrego, Universidade de Aveiro, Portugal
- Bénédicte Bucher, Institut Géographique National, France
- Christophe Claramunt, Institut de Recherche de l'Ecole Navale, France
- Eliseo Clementini, Università degli Studi dell'Aquila, Italy
- Jürgen Döllner, Universität Potsdam, Germany
- Andrew U. Frank, TU Wien, Austria
- Jérôme Gensel, Université Pierre Mendès France, Grenoble, France
- François Golay, Ecole Polytechnique Fédérale de Lausanne, Switzerland
- Bin Jiang, Högskolan i Gävle, Sweden
- Andrew Hudson-Smith, University College of London, United Kingdom
- Didier Josselin, UMR Espace, CNRS, France
- Irina Jackiva, Transporta un sakaru institūts, Latvia
- Thomas Kolbe, TU Berlin, Germany
- Robert Laurini, INSA Lyon, France
- Thomas Leduc, UMR Ambiances Architecturales et Urbaines, CNRS, France
- Damir Medak, Geodetski fakultet Sveučilišta u Zagrebu, Croatia
- Claudine Métral, Université de Genève, Switzerland
- Guillaume Moreau, Ecole Centrale de Nantes, France
- Giovanni Rabino, Politecnico di Milano, Italy
- Monika Sester, Leibniz Univ. Hannover, Germany
- Sisi Zlatanova, TU Delft, The Netherlands

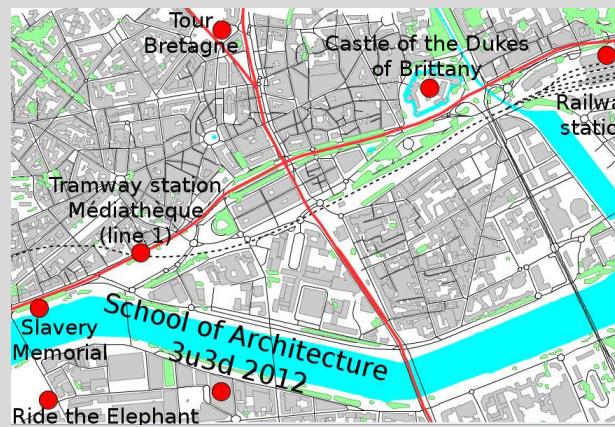
## Conference chairs

- Thomas Leduc
- Guillaume Moreau

## Registration fees

- Before September 7<sup>th</sup>, 2012:
  - Student and COST TU0801 member: 190 €
  - Other: 220 €
- After September 7<sup>th</sup>, 2012:
  - Student and COST TU0801 member: 230 €
  - Other: 270 €

## Venue



## Conference organizations and partners

ambiances  
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## For further information or questions



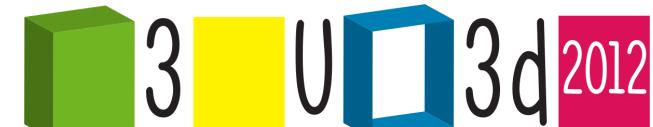
<http://3u3d2012.sciencesconf.org>

3u3d2012@sciencesconf.org

The cover image has been extracted  
from D Fisher-Gewirtzman presentation

October 12, 2012

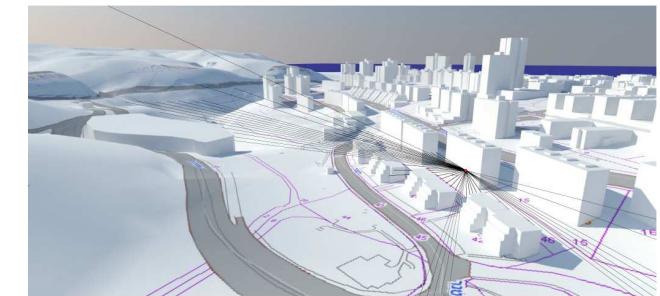
## Final conference of the European COST action TU0801



Usage, Usability, Utility of 3D City Models

Graduate School of Architecture  
Nantes, France

October 29 – October 31, 2012



We invite you to join us at the 3u3d2012 european conference. This event aims at drawing up a state of the art research in 3D City models and facilitating the urban field actors dialog. As final event of the COST action TU0801 "Semantic enrichment of 3D city models for sustainable urban development", it is organized to address the following issues:

- Are 3D city models usable? Do they contain the appropriate information? Is this information presented in an adequate way to the end user?
- Are 3D city models useful? Do they contain a real added value with respect to 2D models?
- Are 3D city models actually used? Could there be other issues beyond usability and utility, such as interoperability or user acceptance?

## Keynote Speakers



### ■ Margaret Horne

Managing Director of the Virtual Newcastle Gateshead City Model, Northumbria University  
Towards a Multifunctional Virtual City Model

### ■ Ass Prof. Architect Dafna Fisher-Gewirtzman

Faculty of Architecture & Town Planning  
Technion, IIT Haifa

3D models as a platform for urban analysis and studies on human perception of space

### ■ Dr. Benoit Frédéricque

Product Manager, 3D city products – point cloud technology, Bentley Systems, Inc.

Using Intelligent 3D City Models for Sustaining Infrastructure

## Preliminary programme

### Monday, Oct. 29<sup>th</sup> 2012

9:00 Onsite registration

9:30 Opening talks

#### ■ Keynote speech by M Horne

11:00 Tea or Coffee break

#### ■ Spatial analysis - Chair: A Ruas

11:30 Measuring the impact of 3D data geometric modeling on spatial analysis: illustration with Skyview factor [\*]  
*M. Brasebin, J. Perret, S. Mustière, and C. Weber*

12:00 Skyline Matching: A robust registration method between Video and GIS  
*S. Zhu, M. Pressigout, M. Servières, L. Morin, and G. Moreau*

12:30 Lunch

#### ■ Ontologies - Chair: T Kolbe

14:00 An ontology of 3D visualization techniques for enriched 3D city models [\*]  
*C. Métral, N. Ghouda, and G. Falquet*

14:30 Developing an ontology of space: application to 3D city modeling [\*]  
*R. Billen, C. Zaki, M. Servières, G. Moreau, and P. Hallot*

15:00 Towards a typology of spatial relations and properties for urban applications [\*]  
*B. Bucher, G. Falquet, E. Clementini, and M. Sester*

15:30	Tea or Coffee break
<b>■ Applications - Chair: S Zlatanova</b>	
16:00	Semantic alignment of documents with 3D city models [*] <i>C. Tardy, L. Mocozet, and G. Falquet</i>
16:30	Extending 3D City Models with Legal Information [*] <i>A. U. Frank, T. Fuhrmann, and G. Navratil</i>
17:00	A generalized approach for historical mock-up acquisition and data modelling: towards historically enriched 3D city models [*] <i>B. Hervy, R. Billen, F. Laroche, C. Carré, M. Servières, M. Van Ruymbeke, V. Tourre, V. Delfosse, and J.-L. Kerouanton</i>
18:30	Ice-breaker event

### Tuesday, Oct. 30<sup>th</sup> 2012

#### ■ Keynote speech by B Frédéricque

10:00 Tea or Coffee break

#### ■ Innovative visualization - Chair: O Marina

10:30 Advances in 3D visualization of air quality data [\*]  
*R. San José, J. L. Pérez, and R. M. González*

11:00 Microscopic transport model animation visualisation on KML base  
*I. Yatskiv, M. Savrasovs*

11:30 All range and heterogeneous multi-scale 3D city models [\*]  
*S. He, G. Besuevsky, V. Tourre, G. Patow, and G. Moreau*

12:00 Preliminary Investigations into the Potential of Improving Rendering Performance of 3D Datasets using 2D Generalisation  
*C. Ellul, J. A. Joubran*

12:30 Lunch

#### ■ Case studies - Chair: R San José

14:00 3D spatial information infrastructure: the case of Port Rotterdam  
*S. Zlatanova, J. Beetz*

14:30 Towards a collaborative and interoperable 3D Building database - A Case study in Walloon Region  
*R. Hajji, R. Billen*

15:00	Interactive model of urban development in residential areas in Skopje [*] <i>O. Marina, E. Masala, S. Pensa, and M. Stavric</i>
15:30	Tea or Coffee break

15:30	<b>■ Data integration - Chair: L Bodum</b>
16:00	EnVIE Project: A Framework to Produce Urban Data at Large Scale [*] <i>V. Tourre, P. Cadio, G. Caniot, and C. Papin</i>

16:30	Integration of urban knowledge through visibility studies and pedestrian behavior analysis in Old Bazaar in Skopje <i>O. Marina, T. Leduc, G. Rabino, S. Gievska, and B. Karanakov</i>
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17:00	Web Based Hybrid Volumetric Visualisation of Urban GIS data - Integration of 4D Temperature and Wind Fields with LoD-2 CityGML models <i>J. Congote, A. Moreno, L. Kabongo, J.-L. Pérez, R. San-José, and O. Ruiz</i>
19:30	Gala dinner

### Wednesday, Oct. 31<sup>st</sup> 2012

#### ■ Keynote speech by D Fisher-Gewirtzman

10:00 Tea or Coffee break

#### ■ Sensitive approaches - Chair: C Métral

10:30 Detailed modelling of the wind comfort in a city avenue at the pedestrian level  
*J. H. Amorim, J. Valente, C. Pimentel, A. I. Miranda, and C. Borrego*

11:00 A new concept of perceptual fidelity to augment virtual urban environments with microclimatic ambiances  
*T. Vigier, G. Moreau, D. Siret, and L. Lescop*

11:30 Children exposure to PM levels in a typical school morning  
*J. Valente, J. H. Amorim, P. Cascão, V. Rodrigues, and C. Borrego*

12:00 Lunch

#### ■ Panel discussion - Chair: T Kolbe

13:30 Closing session

[\*] mark of a full paper