



Uncertainty Management for the Sustainable City

Satellite Conference of Scalable Uncertainty Management (SUM) 2016

IMREDD, Nice Premium, Nice – September 20th 2016

Call for papers

Practitioners and policy-makers assume that attaining sustainable urban development is essentially a question of data monitoring, decision making and policy implementation in a context of well-established scientific theories and positive knowledge of the urban realm. On the contrary, understanding, measuring and managing urban sustainability is a complex task and uncertainty is omnipresent in the kind of knowledge we have on the sustainable city. Urban sustainability is in fact a multi-dimensional issue, involving socioeconomic, environmental, urban design and governance aspects. Cities are complex systems, whose knowledge is always partial, incomplete, if not contradictory (when different points of view are taken into account). Even more, when dealing with sustainable development, researchers and practitioners have to foresight alternative possible futures, whose knowledge is by definition uncertain.

New uncertainty-based methods become thus crucial in dealing with research and policy issues for the sustainable city. This satellite event of the SUM conference is open to both scholars and urban practitioners confronted with uncertainty when dealing with the sustainable city. Presentations are welcome from all disciplinary fields whenever conceptual frameworks, applied methodologies or empirical works recognize and develop the uncertain character of the knowledge on urban sustainability. Applied research within the AI community, as well as contributions from geography, planning, economics, sociology, ecology, engineering, architecture and all other applied sciences, will try to highlight, within this workshop, the following issues:

- Uncertainty in data and data processing for the sustainable city
- Big data, volunteered information and knowledge extraction for the sustainable city
- Managing uncertainty in sustainability dashboards and in indicators for sustainable urban development
- Uncertainty in the knowledge of the physical and socioeconomic processes of the sustainable city, controversial and conflicting knowledge on the sustainable city (for example the role of urban density in the sustainable city, the knowledge of the impact of sustainability policies on self-organized processes, the role of synergies and conflicts within the sustainable city, etc.)
- Knowledge representation issues and uncertainty-based modelling for the sustainable city

- Uncertainty and sustainability for the city: the adaptive city, the resilient city, the anti-fragile city
- Uncertainty, scenario building, decision support, policies and precautionary principle for the sustainable city
- Uncertainty in project management for the sustainable city
- Uncertainties in bottom-up and top-down knowledge and management for the sustainable city

The Uncertainty Management for the Sustainable City workshop of SUM 2016 solicits papers in the following two categories:

- **Unpublished research papers**, reporting original research, work in progress or position papers on controversial issues (8 to 14 pages including references, figures and tables)
- **Extended abstracts** of recently published work in a relevant journal or top-tier conference (2 to 3 pages making reference to the originally published work)

Both kinds of contributions should be edited in the one column style for CEUR-WS (<http://ceur-ws.org/Vol-XXX/samplestyles/paper1.pdf>). Unpublished papers will be peer-reviewed, published on the CEUR Workshop Proceedings (ceur-ws.org) and subsequently proposed for publication on the Journal of Interdisciplinary Methodologies and Issues in Science (<http://jimis.episciences.org>). All submitted papers and extended abstracts will be reviewed by the satellite program committee on the basis of technical and scientific quality, relevance to the satellite topics, significance and clarity.

Each paper is to be submitted electronically as a single PDF file through EasyChair at <https://www.easychair.org/conferences/?conf=umsc2016>. Papers not respecting the formatting instructions or page limits may be rejected without review.

Organizing committee:

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Registration and fees:

Participants to the Uncertainty Management for the Sustainable City workshop will have to register following the SUM 2016 conference guidelines. No additional fees will apply to SUM 2016 participants, but registration to the workshop will be required. A separate registration for the workshop only will also be possible (registration fees of around 100 Euros apply in this case).

Important dates

Deadline for submissions: June 15th 2016

Notification: July 15th 2016

Camera-ready copies: August 26th 2016

Conference: September 20th 2016