

## Call for Contributions

**1. Inform the Chair:** with the Title of your Contribution

**2. Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ADAPTIVE+2018+Special>

Please select Track Preference as **ESREM**

### Special track

## **ESREM: Emergent, Sustainable and Resilient Mobility for Smart Regions and Cities**

### Chair

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along with

ADAPTIVE 2018, The Tenth International Conference on Adaptive and Self-Adaptive Systems and Applications

February 18, 2018 to February 22, 2018 - Barcelona, Spain

<http://www.iaria.org/conferences2018/ADAPTIVE18.html>

Emergent, Sustainable and Resilient Mobility are the keywords summarising a mega0-trend of our century. Extensive R&D investigations and innovation processes towards future mobility are driven faster than ever before. In combination with the predicted changes in customer demands, there is uprising a crucial paradigm change. The primary business sector of the OEMs is expanded, turning from car manufacturers to providers of sustainable mobility services. In terms of strategic alignment, the leading manufacturers are keeping traditional values, but at the same time they establish their own corporations or open to alliances with strong IT players, who benefit from their extensive know-how in artificial intelligence-based software, data processing and user-oriented services.

Thus, Mobility is a global issue for the future. Increasing globalisation, rising world population, demographic change and growing urbanisation are causing traffic levels to rise and are leading to changing mobility needs throughout the world. These developments present technological, ecological, economic and societal challenges.

Sustainable vehicles of the future have to integrate into the urban environment in a compatible way and meet the needs of people and fulfil their individual mobility service requirements. Intelligent automated vehicle systems properly integrated with ICT applications offer new ways of meeting high levels of safety and comfort

by applying new environment detection systems and vehicle-to-vehicle and vehicle-to-infrastructure communication. These vehicles also feature new low-emission drive systems with minimised weight and attractively low costs.

Mobility in smart regions and cities of the future requires innovative concepts and research approaches to address these challenges. These innovative concepts and research approaches are the topic of the special track ESREM at ADAPTIVE 2018. Not only the integration of new sustainable and resilient mobility concepts in existing infrastructures is asked, but new customer orientated business models and services for rising profitability is needed.

We solicit both academic, research, and industrial contributions. We welcome technical papers presenting research and practical results, position papers, survey papers addressing the key problems and solutions on any of the above topics, and short papers on work in progress.

### **Topics include, but not limited to:**

- Open and emergent mobility services and solutions
- Self-organization of decentralized, autonomous vehicles and services
- Individual- and fleet-based predictive mobility optimization
- Internet of things solutions in urban mobility
- Identification of use scenarios for future mobility and related requirement determination
- Sustainable automated and emission free vehicle concepts
- Sustainable urban logistic
- Sustainable infrastructure for future mobility services
- Sustainable digital urban traffic management reconciling societal & individual goals and needs
- Intermodal mobility
- Advanced cooperative intermodal routing information and assistance services
- Resilient connected mobility
- Access-based services („Share Economy“), e.g., peer-to-peer sharing, car-access-based-services, data-driven service
- Case studies and benchmark examples related to all of the above topics
- Experience reports related to all of the above topics
- Development processes, tools and methods supporting all of the above topics

### **Contribution Types**

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]
- Presentations: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]
- Demos: two pages [posted on [www.iaria.org](http://www.iaria.org)]

### **Important Datelines**

- **Inform the Chair: As soon as you decided to contribute**
- **Submission: no later than *January 20th, 2018***
- **Registration and Camera-ready: *February 1st, 2018***

*Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.*

### **Paper Format**

- See: <http://www.aria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.aria.org/editorialrules.html>

### **Publications**

- Extended versions of selected papers will be published in IARIA Journals: <http://www.ariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

### **Paper Submission**

<https://www.ariasubmit.org/conferences/submit/newcontribution.php?event=ADAPTIVE+2018+Special>

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### **Registration**

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.aria.org/registration.html>

### **Contacts**

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