

# CALL FOR PAPERS

The International Conference on Information Fusion is the premier forum for interchange of the latest research in data and information fusion and its impacts on our society. The conference brings together researchers and practitioners from academia and industry to report on the latest scientific and technical advances. Authors are invited to submit papers describing advances and applications in information fusion.

The 21st FUSION conference will be held in Cambridge, United Kingdom, at the Department of Engineering, University of Cambridge, located near the centre of this historic and ancient university town. The colleges, King's College Chapel, the River Cam and the Grantchester Meadows are all within easy walking distance and a must-see for visitors to Cambridge.

# TOPICS OF INTEREST

The conference deals with both high-level and low-level data and information fusion. The four main categories and example subcategories (non-exhaustive) are:

1. Theory and representation: probability theory, Bayesian inference, stochastic processes, fuzzy sets, Dempster–Shafer theory and belief functions. 2. Algorithms for target tracking, localization, situational awareness, intent/ behaviour/swarm modeling, decision making, data mining, data analytics, sensor/resource management, compressed sensing, pattern analysis, machine learning, deep learning, artificial intelligence, sonar/radar/video tracking, image fusion, data association, distributed fusion, Markov Chain Monte Carlo, sequential MC and sensor registration.

3. Modeling, simulation and evaluation, considering a wide range from target and sensor modeling to fusion/tracking performance evaluation, and simulation tools.

4. Applications of information fusion such as sensor networks, navigation and guidance, aerospace, robotics, imaging, autonomy, computer and homeland security, defense and intelligence, operations research, business intelligence, environmental monitoring, medical care, intelligent transportation, economics and finance, Internet of Things, smart cities, remote sensing and big data.

## PAPER SUBMISSION

Prospective authors are invited to submit papers electronically via the system found at the conference web page. Paper templates and submission instructions will be available at the conference website **www.fusion2018.org**. Submitted papers should be no more than eight pages in length. All papers must be approved for public release prior to submission.

IMPORTANT DEA	ADLINES
: Special Session proposals and Tutorial	l proposals 1 February 2018
Full paper submission	1 March 2018
Notication of acceptance	1 May 2018
Final paper submission and early regis	stration 1 June 2018
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### General Co-Chairs: Professor Simon Godsill, University of Cambridge UK Professor Lyudmila Mihaylova, University of Sheffield, UK Professor Simon Maskell,

**Finance Chair/Treasurer:** Professor Visakan Kadirkamanathan, University of Sheffield, UK

Liverpool University, UK

**Program co-chairs:** Dr Wolfgang Koch, FKIE, Germany Dr Sumeet Singh, University of Cambridge, UK

## Technical co-chairs:

Professor Uwe Hanebeck, Karlsruhe Institute of Technology (KIT), Germany Dr Stefano Coraluppi, Systems & Technology Research, USA Dr Roy Streit, Metron, USA Dr Benjamin Noack, Karlsruhe Institute of Technology (KIT), Germany

### Publication co-chairs:

Professor Peter Willett, University of Connecticut, USA Dr Daniel Clark, Telecom SudParis, France Dr Roland Hostettler, <u>Aalto University</u>, Finland

### Academic co-chairs:

Professor Murat Efe, Ankara University, Turkey Dr Simon Julier, University College London, UK Professor Xiao-Rong Li, University of New Orleans, USA Professor Jonathon Chambers, Newcastle University, UK

> **Tutorials chair:** Professor Simo Särkkä, Aalto University, Finland

#### Special Sessions chairs:

Professor Gustaf Hendeby, Linköping University, Sweden Professor Thomas Schön, Uppsala University, Sweden

#### Awards co-chairs:

Professor Yaakov Bar-Shalom, University of Conneticut, USA Professor Fredrik Gustafsson, Linköping University, Sweden Dr Alan Steinberg, USA

International Liaison Chair Dr Le Yang, Jiangnan University, China