



## **1<sup>st</sup> Announcement and Call for Papers**

### **Joint EuroCOW - M3DMaN event**

**European Calibration and Orientation Workshop with  
Multisensor Systems for 3D Mapping and Navigation**

<http://www.eurocow.org/index.php/eurocow-2019>

Part of the **ISPRS Geospatial Week 2019**

13-14 June, 2019

Enschede, The Netherlands

<http://www.gsw2019.org>

The meeting brings together the world experts, from both public and private sectors, to present and discuss the recent findings on Sensor Calibration and Orientation as well as Multisensory systems for Navigation and Mapping. With the rapid development of autonomous platforms, this traditional field of photogrammetry and geodesy integrates with robotics, computer vision and system control. Indeed, tighter integration between sensors and platforms remains an open challenge both algorithmically and practically for a number of applications that requires higher measures for reliability, integrity as well as accuracy both in navigation and mapping. Also, calibration procedures need to be revamped for new (and often small) optical sensors as well as their integration with navigation devices.

This one and half-day 'single-track' meeting strives to be practical, informative and informal where the experts with theoretical and hands-on experience discuss in a relax atmosphere. The workshop will be part of the ISPRS Geospatial Week 2019 and is hosted by the University of Twente in parallel with a number of related geospatial workshops.

### Themes of Event:

- General orientation and calibration algorithms and procedures
- Progress in INS, GNSS, timing technology and algorithms
- Reliability and integrity measures with accent on low-altitude flying UAV
- New optical sensors and their calibration procedures
- Dynamic networks
- Mathematical methods for real-time navigation
- Navigation, orientation, calibration, mapping with multi-platforms and multi-sensors
- Data fusion between active and passive optical sensors as well as navigation sensors
- Multi-sensor navigation for autonomous vehicles

### Submission of papers:

Authors who wish to have their papers appearing in a designated volume of the *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences* need to submit the manuscript for a double-blind peer review process. Alternatively, authors can submit an extended abstract for a peer review process, where accepted contributions will appear in in a designated volume of the *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*. Invited or special presentations without a paper considered of high importance will be published on EuroCOW.org web.

### Important dates:

17 January, 2019	Full paper submission (Annals)
4 February, 2019	Extended abstract submission (Archives)
1 March, 2019	Abstract author notification
8 March, 2019	Full paper Author notification
2 April, 2019	Camera ready paper submission
10-14 June, 2019:	Geospatial week

### Scientific Committee:

Jan Skaloud (WG I/9), EPFL, Switzerland

Ismael Colomina (WG I/9), Geonumerics, Spain

Michael Cramer (WG I/9), University of Stuttgart, Germany

Cheng Wang (WG I/6), Xiamen University, China

Naser El-Sheimy (WG I/7), University of Calgary, Canada  
Jonathan Li (WG I/2), University of Waterloo, Canada  
Craig Glenie (WG I/9), University of Huston, USA  
Andrea Lingua (WG I/6), Polytechnic of Turin, Italy  
Julian Smith (WG I/6), University of Cape Town, South Africa  
Ayman Habib, Purdue University, USA  
Christian Heipke, Leibniz University of Hannover, Germany  
Jens-André Paffenholz, Leibniz University of Hannover, Germany  
Claus Brenner, Leibniz University of Hannover, Germany  
Vladik Kreinovic, University of Texas, USA  
Christoph Stiller, KIT, Karlsruhe, Germany  
Rafael Toledo-Moreo, University of Cartagena, Spain  
Ronny Hänsch, Technical University of Berlin, Germany  
Mozhdeh Shahbazi, University of Calgary, Canada  
Andrea Fusiello, Technical Universtiy of Udine, Italy  
Cyrill Stachniss, University of Bonn, Germany  
Norbert Haala, University of Stuttgart, Germany  
Jon Mills, NewCastle University, UK

#### **Supporting ISPRS Working Groups:**

- WG I/9 Integrated Sensor Orientation, Calibration, Navigation and Mapping (<http://www2.isprs.org/commissions/comm1/wg9.html>)
- WGI/6 Multi-sensor Integration and Fusion (<http://www2.isprs.org/commissions/comm1/wg6.html>)
- WGI/7 Mobile Mapping Technology (<http://www2.isprs.org/commissions/comm1/wg7.html>)
- WGI/2 LiDAR, Air- and Spaceborne Optical Sensing (<http://www2.isprs.org/commissions/comm1/wg2.html>)
- WG II/1 Image Orientation (<http://www2.isprs.org/commissions/comm2/wg1.html>)