



EuroSDR One-Day Workshop on  
**Single Photon and Geiger-Mode LiDAR**  
Institut Cartogràfic i Geològic de Catalunya (ICGC)  
Wednesday 6<sup>th</sup> March 2019, Barcelona, Spain

### Programme

- 08:00 Registration and coffee
- 09:00 Introduction and Welcome  
*Julià Talaya, ICGC, Spain / Paul Kane, President of EuroSDR, Ireland*
- 09:10 EuroSDR Single Photon / Geiger Mode Lidar questionnaire results  
*Jon Mills, Newcastle University, UK*
- 09:30 EuroSDR preliminary study – potential of SPL  
*Charly Bernard, IGN, France*
- 09:50 Update of the SPL LiDAR system and software for filtering and quality control  
*Ron Roth, Product Manager Lidar, Leica Geosystems*
- 10:20 Geiger Mode LiDAR 101 technical overview  
*Mark Romano, Director of Geospatial Product Strategy, Harris Corporation*
- 10:50 Discussion / Q&A
- 11:00 Coffee break
- 11:30 Using high-density LiDAR data for building models  
*Poul Nørgård, Chief Product Manager, Leica Geosystems*
- 12:00 Single Photon v Full Waveform LiDAR - technological differences and point cloud properties  
*Gottfried Mandlbauer, TU Wien / Stuttgart University, Austria / Germany*
- 12:25 Single Photon LiDAR in practical use in Europe  
*Simon Musäus, COWI, Denmark*
- 12:50 Discussion / Q&A
- 13:00 Lunch break
- 14:00 SPL compared to traditional and other high performance laser systems  
*Jeroen Leusink / Erik Nobbe, Het Waterschapshuis, The Netherlands*
- 14:20 Physical modeling of single photon and Geiger mode LiDAR systems  
*Nicolas Riviere and Paul-Edouard Dupouy, ONERA, France*
- 14:40 Classifying Single Photon LiDAR data using Machine Learning and Open Source tools  
*Víctor García Morales, Tracasa, Spain*
- 15:00 Single photon LiDAR in forestry applications  
*André Wästlund, Swedish University of Agricultural Sciences, Sweden*
- 15:20 Discussion / Q&A
- 15:30 Tea break
- 16:00 OS experiences with SPL  
*Hannah Hunt, Ordnance Survey, UK*
- 16:20 Single Photon developments at FGI  
*Xinlian Liang, FGI, Finland*
- 16:40 SPL point cloud classification for DTM and automatic vector production  
*Guillaume Koehl, IGN, France*
- 17:00 EuroSDR Single Photon / Geiger Mode Lidar benchmark project: proposal and discussion  
*Jon Mills, Newcastle University, UK and Fabio Remondino, FBK Trento, Italy*
- 17:10 Discussion / Q&A
- 17:30 Close
- 19:00 Dinner: Café de la Pedrera, Barcelona ([www.cafedelapedrera.com/en/](http://www.cafedelapedrera.com/en/))