The EARSel Special Interest Group on Imaging Spectroscopy stimulates international discussion among specialists working with innovative spectral Earth Observation technologies and fosters interdisciplinary research addressing today's key environmental and societal challenges. Imaging spectroscopy is recently expanding from traditional airborne platforms towards new ground-based, unmanned airborne and satellite systems. At the same time, novel spectral signals, as for instance chlorophyll fluorescence or mid-infrared and thermal emissions, are being explored. These technological and methodological developments are inviting for exchange of new knowledge and fruitful scientific discussions during the upcoming 11th EARSel SIG IS Workshop.

Following up the tradition of ten previous successful workshops, we would like to invite you to the 11th EARSel SIG IS Workshop to the Czech Republic, to the city of Brno, where the founder of the modern genetics Gregor Johann Mendel carried his famous pea plant experiments. With newly established science and technology centres and numerous research and development activities, Brno became one of the most vibrant Czech cities, offering not only an ideal environment for research and development, but also numerous art venues and cultural events (www.gotobrno.cz/en).

We are looking forward welcoming you at 11th EARSel SIG IS Workshop, which will take place from 6 to 8 February 2019 in the Masaryk University campus Brno-Bohunice [map link].
Scientific Committee

- Eyal Ben-Dor, Tel Aviv Univ., IL
- Jocelyn Chanussot, Grenoble INP, FR
- Jean-Baptiste Feret, Irstea, FR
- Claudia Giardino, IREA CNR, IT
- Luis Guanter, GFZ Potsdam, D
- Robert O. Green, NASA JPL, USA
- Lammert Kooistra, Wageningen Univ., NL
- Sebastian van der Linden, Humboldt Univ., D
- Zbyněk Malenovský, Univ. of Tasmania, AU
- José Moreno, Univ. of Valencia, E
- Michael Rast, ESA ESRIN, IT
- Miina Rautiainen, Aalto Univ., FI
- Michael E. Schaepman, Univ. of Zurich, CH
- Martin Schlerf, LIST, LU
- Christiaan van der Tol, Univ. of Twente - ITC, NL
- Jochem Verrelst, Univ. of Valencia, E

Workshop Topics

We encourage scientific contributions related to recent advances in technology, methods and applications of imaging spectroscopy. Please submit abstracts of your contributions covering the following topics:

Advanced methods for spectroscopy data calibration, processing, analyzing and modelling:

- Sensor spectral and radiometric calibration, atmospheric and geometric corrections
- Data analyzing approaches, software toolboxes, machine learning and big data mining
- Models of radiative transfer, inversion schemes and data assimilation techniques
- Laboratory and in-situ field spectroscopy and product validation approaches

Spectroscopy data fusion and application in Earth sciences:

- Combined use of spectroscopy and other observations (LiDAR, SAR, thermal, etc.)
- Upscaling and downscaling spectroscopy data in modelling the Earth spheres
- Spectroscopy in assessment of ecosystem processes, functions and societal services (vegetation, soils, snow & ice, inland & coastal waters, urban areas, etc)
- Spectroscopy use in the context of natural disasters, hazards and societal challenges (food security, water availability, loss of genetic and functional biodiversity, etc.)

Innovative sensing platforms and sensors:

- Ground/tower, multi-angular, drone, air and space-borne spectroscopy platforms
- Synergies between sensors
- Progressive spectral sensor concepts and future spectroscopy missions

Organizing Committee

- Lucie Homolová, CzechGlobe, CZ
- František Zemek, CzechGlobe, CZ
- Olga Brovkina, CzechGlobe, CZ
- Petr Lukeš, CzechGlobe, CZ
- Jan Hanuš, CzechGlobe, CZ
- Heide Bierbrauer, EARSeL Secretariat, D
- Lena Halounová, EARSeL Vice-Chair, ČVUT, CZ
- Mathias Kneubühler, SIG IS Chairman, UZH, CH
- Andreas Müller, SIG IS Chairman, DLR, D