



Prof. Johanna Tamminen, Finnish Meteorological Institute (FMI), Finland

Prof. Johanna Tamminen is leading the Earth Observation Research Unit of FMI's Space and Earth Observation Centre, which consist of 3 groups and 30 scientists. She has over 25 years of experience in atmospheric remote sensing and mathematical and statistical methods to analyze and characterize satellite data. She has a PhD in applied mathematics from the University of Helsinki. She is a Co-Principal Investigator of Ozone Monitoring Instrument (OMI) on-board NASA's EOS-Aura satellite (since 2005). She has been a member of ESA Mission Advisory Group (MAG) for Sentinel 5 Precursor mission (2012-2018) and MAG for Anthropogenic CO₂ Monitoring Mission (2018-19) and presently she is a member of ESA Advisory Committee on Earth Observation (2019 onwards). She is the vice director of Finnish Academy funded Centre of Excellence in Inverse Modelling and Imaging. She has participated on several national and international research projects on atmospheric research and remote sensing as responsible leader.



Prof. Fuan Tsai, National Central University, Taiwan

Prof. Fuan Tsai is a Director of Center for Space and Remote Sensing Research (CSRSR) in the Department of Civil Engineering of National Central University (NCU), Taoyuan, Taiwan.

His research focuses on the computational algorithms and integrated systems for the process, analysis, simulation, modeling, and visualization of complex geoinformation as well as their applications. He also works on the airborne and ground-based LiDAR and photogrammetry for 3D building modeling.



Dr. Anu Reinart, University of Tartu, Estonia

Dr. Anu Reinart is a Director of Tartu Observatory, University of Tartu. She has PhD in Environmental Physics from University of Tartu. Her background is in research of optically complex waters with remote sensing methods. She is a national representative of EC Copernicus User Forum and a member of Estonian delegation in ESA.



Dr Jaan Praks, Aalto University, Finland

Jaan Praks works as an Assistant professor at Aalto University, Finland. His background is in microwave Earth Observation and small satellites. His expertise areas are advanced SAR technologies such as interferometry and polarimetry for Remote Sensing, forest remote sensing, EM modeling of trees and forest, hyperspectral remote sensing and also nanosatellites. With his students he built the first Finnish satellite missions (Aalto-1) and also works on several new missions. He leads research team which is part of Finnish Centre of Excellence on Sustainable Space Research. Several New Space start-ups have started from his group. Jaan Praks is also known as an inspiring public speaker who promotes small satellite technology and sustainable space utilization.



Dr. Kuo-Hsin Tseng, National Central University, Taiwan

Dr. Kuo-Hsin Tseng is an Associate professor in the Center for Space and Remote Sensing Research (CSRSR) in the Department of Civil Engineering and Institute of Hydrological and Oceanic Sciences of National Central University (NCU), Taoyuan, Taiwan.

His research focuses on satellite radar/laser altimetry for coastal sea level and hydrology. He also works on the synthetic aperture radar interferometry (InSAR) in corporation with GNSS network for the investigation of land displacement associated with land use.



Dr. Ivan Csiszar, National Oceanic and Atmospheric Administration (NOAA), USA

Dr. Ivan Csiszar is the NOAA Joint Polar Satellite System (JPSS) Product Lead for the operational VIIRS Active Fire product and the Lead of the NOAA JPSS Land Product Domain. Currently his work focuses on NOAA's new generation environmental satellites. He also works on development and evaluation activities for fire and other land surface products from NOAA's GOES-R series. He is involved in various efforts aimed at operational applications of fire products in disaster and resource management, and in air quality modeling and monitoring. Additionally, he coordinates the use of various satellite-derived land products in Numerical Weather Forecast models.

Ivan Csiszar has about 30 years of experience in satellite measurements of the atmosphere and the land surface. His early research focused on atmospheric sounding and on the retrieval of cloud optical and microphysical properties. He later worked on various issues related to the retrieval of land surface

properties. In particular, he led multiple research projects aimed at fire mapping, evaluating fire products and impacts, and data analysis, based on measurements from the Advanced Very High Resolution Radiometer (AVHRR), the Moderate Resolution Imaging Spectroradiometer (MODIS), the Visible Infrared Imaging Radiometer Suite (VIIRS) and the Geostationary Operational Environmental Satellites (GOES).

Over the years, Ivan Csiszar contributed to various international coordination activities, including the Global Observation of Forest and Land Cover Dynamics (GOFC-GOLD), the Committee on Earth Observation Satellites (CEOS), the Global Climate Observing System (GCOS) and the Coordination Group for Meteorological Satellites (CGMS).



Dr. René Laufer, Baylor University, USA

Dr. René Laufer is an Associate research professor and head of the Space Science Lab of the Center for Astrophysics, Space Physics, and Engineering Research (CASPER) at Baylor University, Texas, USA. His research interests include topics like small satellites, lunar exploration and development, systems engineering and mission design, scientific instrumentation and education and public outreach. Rene is also honorary associate professor at the Space Lab of the University of Cape Town, South Africa and global faculty at the International Space University (ISU). He co-chairs the small satellite committee of the International Academy of Astronautics (IAA) and has been involved in several small satellite related study groups and conferences. In the past Rene has worked at German Aerospace Center (DLR) in the field of space exploration and being involved in several planetary probe missions and at the University of Stuttgart, Germany, in the area of small satellites and lunar exploration and teaches on various space engineering and space sciences topics on four continents.



Dr. Rivo Uiboupin, Tallinn University of Technology, Estonia

Dr. Rivo Uiboupin is a senior researcher and a head of Modelling and Remote Sensing Division at the Marine Systems Institute, at Tallinn University of Technology. In the Modelling and Remote Sensing Division 20 researchers work on synergistic use of remote sensing data and numerical modelling. Rivo has PhD in Earth Sciences (Sea surface temperature and chlorophyll a in the Baltic Sea) from the Tallinn University of Technology. He has experience in analyzing remote sensing data for characterizing the status and processes of the Baltic Sea. His R&D work has been focused on exploiting EO data (including COPERNICUS products) for development of marine environment monitoring/forecasting services. He has participated in research projects dealing with sea ice, wind and wave fields, sea level, water quality and oil pollution. Since 2016, he is a delegate in ESA's Data Operations Scientific and Technical Advisory Group (PB-EO/DOSTAG).



Dr. Velle Toll, University of Tartu, Estonia

Dr. Velle Toll is a senior research fellow at the Department of Atmospheric Physics at the University of Tartu. He has a PhD in Atmospheric Physics from University of Tartu, Estonia. He has previously worked in Estonian Weather Service and University of Reading, UK. His main research fields are climate impacts of anthropogenic aerosols by applying methods of atmospheric remote sensing and climate modelling. In his current research project, he applies remote sensing methods to study anomalies in cloud properties induced by hot spots of anthropogenic pollution.



Dr. Aive Liibus, Estonian University of Life Sciences, Estonia

Dr. Aive Liibus is an Associate professor in the Chair of Geomatics at Estonian University of Life Sciences. Her research focuses on satellite radar/laser altimetry for coastal sea level. She also has long experiences with high accuracy GNSS measurements on the sea, and GNSS and tide gauge time series processing to calculate land and sea level rising values.



Dr. Krista Alikas, University of Tartu, Estonia

Dr. Krista Alikas is an Associate professor in the Department of Remote Sensing at Tartu Observatory, University of Tartu. She has a PhD in environmental technology. Her research has focused on improving and developing approaches to derive water quality parameters for inland and coastal waters from remote sensing data. She has been involved in European Space Agency's ENVISAT/MERIS validation team and currently leads the Tartu Observatory's activities under Sentinel-3 Validation team in order to give feedback about the remote sensing derived products for ocean color applications. She is teaching in University of Tartu various remote sensing courses for BSc, MSc, PhD level students.



Dr. Kaupo Voormansik, KappaZeta, Estonia

Kaupo Voormansik works as a radar remote sensing expert in Earth Observation services company KappaZeta. His background is in synthetic aperture radar and space technology. Kaupo's expertise is in advanced SAR techniques, interferometry and polarimetry, for agricultural applications. He was the systems engineer of first Estonian satellite EstCube-1 from 2008 to 2013. Kaupo has a PhD in SAR applications (University of Tartu) and double MSc – in Space Technology (International Space University, France) and Computer Science (University of Tartu). In KappaZeta Kaupo and his colleagues are developing applications for agricultural sector using SAR and deep learning technologies.



Dr Jekaterina Služenikina, Estonian Environment Agency (EstEA), Estonia

Jekaterina is a satellite specialist, working in the Numerical Modeling Department of Estonian Weather Service at EstEA. She is responsible for operational satellite data processing and visualization to provide duty forecasters with rapidly changing weather satellite data. Jekaterina has experience in satellite data assimilation into numerical weather prediction model, running the NWCSAF software packages that support Nowcasting and Very Short Range Forecasting products generation, operational visualization of marine and land products provided by EUMETSAT and Copernicus. At the moment, Jekaterina is involved in the preparation of the sea-ice charting project that is aimed to improve the quality of sea-ice information issued by Estonian Weather Service in the winter navigation period. She has a PhD in Earth Sciences from Tallinn University of Technology, Estonia.



Dr François Bourrin, University of Perpignan, France.

François is an Assistant Professor at the University of Perpignan, France. He is leading research on various topics in coastal oceanography mainly in the Mediterranean Sea but also in sub-polar areas (Svalbards, Baltic Sea and Tierra del Fuego): (1) source-to-sink transport of particulate matter (2) impact of extreme events (floods and storms) on sediment dynamics (3) multi-platform approach from satellites to gliders to study spatio-temporal variability of coastal waters. He is involved in several national (MATUGLI) and international research programs (MISTRALS) and operational oceanography networks (MOOSE, JERICO).



Dr Juha Karvonen, Finnish Meteorological Institute, Finland

Dr Juha Karvonen is currently working as a senior researcher scientist in the Polar Oceanography and Sea Ice research group at Finnish Meteorological Institute (FMI). He is responsible of the Copernicus Marine Environment Monitoring Service (CMEMS) sea ice thematic assembly centre (SITAC) Baltic Sea production unit providing sea ice information over the Baltic Sea to CMEMS. Data provided by CMEMS are also used by the Finnish Ice Service (FIS) for making daily Baltic Sea ice charts in co-operation with Swedish Meteorological and Hydrological Institute (SMHI). His main research interests are digital signal and image processing, SAR and other EO data processing, EO data analysis and algorithm development, sea ice, and operational marine services.



Dr. Piia Post, University of Tartu, Estonia

Dr. Piia Post is an Associate professor in the Institute of Physics University of Tartu. She has long experiences with using satellite data for climate analysis of cloudiness and atmospheric gases, but her present focus is on extreme events analysis. Piia has a responsibility to represent Estonia in international scientific organisations (IAMAS) and networks (COST actions, Baltic Earth). She has been a leading organiser of several training events for professional meteorologists, but also for post-graduate students.