### 7th Workshop on Advanced RF Sensors and Remote Sensing Instruments

**ARSI'22** 

## 5th Ka-band Earth Observation Radar Mission Workshop

**KEO'22** 

# 10-12 May 2022, ESA-ESTEC, Noordwijk, The Netherlands

Workshop:

May 2022 will see the 7<sup>th</sup> edition of the workshop on "Advanced RF Sensors and Remote Sensing Instruments" and the 5<sup>th</sup> workshop on "Ka-band Earth Observation Radar Missions" organized by ESA/ESTEC.

As in previous years, the purpose is to bring together experts from industry and research organizations to share and present their latest findings on RF remote sensing technology, processing and systems.

The two workshops will review the state of the art in current and future mission concepts including applications, science objectives, mission design and instrument technology. These includes new ideas for applications enabled by Ka-band, and higher frequencies, SAR and InSAR.

Due to uncertainty in the evolution of the Covid19 pandemic, the event will take place in a hybrid live/virtual format from 10-12 May 2022 at ESTEC, Noordwijk, The Netherlands. Depending on the local situation in May 2022, the number of live-event attendees may be limited. Industry, researchers and engineers active in the field are cordially invited to participate and to present their latest findings.

### Important Dates (preliminary)

For up-to-date workshop information please see the workshop website at: <a href="www.arsi-keo.com">www.arsi-keo.com</a>

First announcement: July 2021 2021 Call for papers: 11 October Deadline for draft papers: 2022 16 January Acceptance notification: 18 February 2022 Deadline for final papers: 2022 6 April Early registration: 6 April 2022 Advance programme: 8 April 2022





10-12 May 2022

### **Workshop Topics**

#### **Systems and Missions**

- Systems and Sensors
- System Simulation and Modelling
- Formation Flying
- Innovative Concepts and Applications
- Bi- and Multi-static Radar
- Active instruments (Ka-band and beyond)
- Passive Instruments and Radiometers
- Space science and planetary instruments
- Cubesat and Mini-Satellite Instruments

### **Applications**

- Crisis and Disaster Management
- Urban Development
- Local DEMs and Cartography
- Reconnaissance and Surveillance Tasks
- Ship and Boat Detection and Classification
- Geology, Hydrology and Land Use
- Glaciology, Oceanography

#### Technology and Sub-systems

- Instrument Front-ends
- Sub-systems
- Digital Beamforming
- Calibration and Validation
- Atmospheric and Ionospheric Corrections
- On-board Processing

#### Organisers:

Ernesto.Imbembo@esa.int

Salvatore.Daddio@esa.int

<u>Ishuwa.Sikaneta@esa.int</u>

Petronilo.Martin.lglesias@esa.int

Alessio.Mancini1@esa.int

Erio.Grandini@esa.int

Points of contact for technical matters:

Ernesto.Imbembo@esa.int

Salvatore.Daddio@esa.int

Ishuwa.Sikaneta@esa.int



