ETH zürich

esa
European Space Agency

Scientific and Fundamental Aspects of GNSS / Galileo

7th International Colloquium

4 – 6 September 2019

ETH Zurich
Zurich, Switzerland

organised by the European Space Agency (ESA) and ETH Zurich

ANNOUNCEMENT / SAVE THE DATE

Calendar of Events

Abstract Submission Deadline:	31 March 2019
Notification of Acceptance:	30 April 2019
Preliminary Programme:	13 May 2019
Early Registration Deadline:	15 July 2019
Authors Registration Deadline:	15 July 2019
Oral Presenters Biography:	15 July 2019
Colloquium Dates:	4 – 6 September
Full Paper Submission Deadline:	30 September 2019

European Space Agency

7th International Colloquium on Scientific and Fundamental Aspects of GNSS

4 - 6 September 2019, Zurich

Objectives

This colloquium brings together members of the European scientific community and their international partners involved in the use of Galileo and other GNSS in their research. The various possibilities to use Galileo and other GNSS satellites for scientific purposes shall be reviewed. The Colloquium shall contribute to GNSS development in general based on scientific approaches, in particular to raise awareness of those in charge of Galileo development and operations as well as in development of recent scientific achievements in the field.

Earth Sciences

- Geodesy
- Geodynamics, geophysics and oceanography
- Global tectonics
- Reference frames
- Ionosphere / space weather
- Troposphere / climatology
- Disaster monitoring
- Gravity field
- GNSS remote sensing, GNSS reflectometry

Physics

- Test of General Relativity and alternative theories
- Fundamental constants
- Relativistic reference frames
- Relativistic positioning
- Astrometry, VLBI, pulsar timing
- Quantum technologies for positioning, navigation and timing

Metrology

- Atomic clocks for space and ground-segment
- Galileo timing system
- Time scales and time transfer
- Inter-satellite links
- Satellite Laser Ranging
- Precise orbit determination
- High-precision clocks in receivers

Navigation, Positioning and its Applications

- Signal processing
- Signal propagation aspects
- Multi-constellation GNSS
- Sensors, hybridization and integrated navigation for science
- Precise positioning

GNSS Science Transversal

- GNSS Big Data and Data archives
- Internet of Things Positioning for Science
- Scientific Payloads in GNSS satellites
- Disruptive technologies
- Cubesats, HAPS and UAVs for GNSS science
- Software receivers / low-cost SDR
- Autonomous Vehicles for Science
- GNSS science and education