Reliable navigation and positioning are becoming imperative in more and more applications for safety-critical purposes, public services and consumer products. A robust localization solution, which will be available continuously, is needed regardless of the specific environment, i.e., outdoors and indoors, and on different platforms such as stand-alone navigators and mobile devices. ICL-GNSS addresses the latest research on wireless and satellite-based positioning techniques to provide reliable and accurate position information with low latency. The emphasis is on the design of mass-market navigation receivers and related tools and methodologies.

The scope includes (but is not limited to) the following topics:

- Antennas and RF front-end for GNSS receivers
- Design, prototyping and testing of positioning devices
- Acquisition, tracking and navigation algorithms
- Detection and mitigation techniques for adverse propagation conditions
- Wireless and sensor-based localization
- GNSS applications for remote sensing, ionospheric sounding and space weather
- Precise timing for GNSS and terrestrial systems
- Security and privacy in joint communication and navigation systems
- Authentication and privacy aspects of positioning
- Spoofing countermeasures
- Cooperative and peer-to-peer positioning
- Positioning based on signals-of-opportunity
- Multi-GNSS receivers and emerging navigation satellite systems
- Indoor positioning and localization in densely populated urban areas
- Hybrid NAV/COM positioning
- Cognitive positioning architectures
- Positioning for autonomous systems (robots, planes, land and marine vehicles)
- Crowd-sourced and swarm localization
- Location-based mobility models, services and applications

We invite you to submit your original full papers on the most recent results and technology trends in the fields of positioning. Accepted and presented papers will be published in the conference proceedings and submitted to IEEE Xplore for publication.

Paper Submission: Submitted papers must represent original material that is not currently under review in any other conference or journal, and has not been previously published. Papers should be four to six pages long in the specified format.

Papers should be submitted as PDF files prepared according to IEEE two-column A4 format guidelines. For more information see the conference web site [http://www.icl-gnss.org/](http://www.icl-gnss.org/) or contact us at [icl-gnss@dsi.uminho.pt](mailto:icl-gnss@dsi.uminho.pt).