CALL FOR PAPERS

ELMAR 2012 Special Session on

Precise Point Positioning and RTK

The GPS carrier phase can be measured with millimetre accuracy but it is periodic. The resolution of the integer ambiguities was so far limited by the small carrier wavelength and multipath. The modernization of GPS and GLONASS as well as the development of Galileo and Compass bring new signals on additional frequencies with larger bandwidths and binary offset carrier modulation. These new signals will improve the reliability of carrier phase positioning. However, the reliability of carrier tracking, carrier phase integer ambiguity resolution and carrier phase bias estimation still have to be improved for many Real-Time Kinematics (RTK) and Precise Point Positioning applications.

Topics (open to others):

- Single-frequency and multi-frequency carrier phase positioning
- Integer ambiguity resolution
- Integer ambiguity resolution with tight and soft baseline constraints
- Estimation of satellite phase and code biases
- Vector carrier phase tracking
- Integrity of carrier phase positioning
- Precise point positioning and RTK
- Network RTK
- Carrier phase positioning with pseudolites

Paper submission deadline: April 15, 2012

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