

Examination questions

1. Basics of an acquisition process. Estimated parameters and statistical approach
2. Time domain acquisition of GPS L1 signal
3. Frequency domain acquisition (Parallel code search) and Fourier transform
4. Averaging acquisition and DBZP algorithm
5. Single dwell and multiple dwell detection. Tong's algorithm
6. Basics of tracking process. DLL, PLL and FLL
7. Loop filter impact on dynamic characteristics of tracking
8. Discriminators. S-curve
9. Multipath impact on the tracking process. Spacing. Narrow correlators
10. Maximum likelihood tracking. Feedforward estimators
11. Batch processing and vector tracking
12. Lock detectors. Data extracting fundamentals
13. New GPS and Galileo signals. Acquisition of BOC signals
14. Tracking of BOC signals
15. GLONASS system and signal characteristics
16. Beidou system and signal characteristics