# PROGRAM[1]

## MONDAY, 25 MAY

**8.00 – 9.50** **REGISTRATION OF THE CONFERENCE PARTICIPANTS**

**10.00 – 10.15** **OPENING CEREMONY**

### SESSION I INTEGRATED SYSTEMS

Chairmen **Dr. B.S. Rivkin**, Russia
**Mr. L. Camberlein,** France

### INVITED PAPER

10.15 – 11.00 1.[2] **Didier Faivre** (*European Space Agency (ESA), **France***)
European GNSS Programme EGNOS and GALILEO.
Operational Results and Programmatic Perspectives

### PLENARY PAPER

11.00 – 11.20 2. **M.W.A. Khan, R. Piche, E.S. Lohan** (*Tampere University of Technology, **Finland***)
**9**[3] Experimental study of fusion of UWB ranging and RTK
**The paper will be presented online.**

11.20 – 11.45 COFFEE BREAK

### PLENARY PAPERS

11.45 – 12.05 3. **G.I. Emel'yantsev, A.P. Stepanov, B.A. Blazhnov, I.V. Semenov** (*Concern CSRI Elektropribor, JSC, ITMO University, **Russia***)
**100** GLONASS Data Processing in GPS Compass with Antenna Base Equal to Carrier Wavelength

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[1] *The Conference Program Committee reserves the right to make alterations in the final Conference Program*
[2] *Paper no. in the Conference Program*
[3] *Paper no. in CoMS-Elektropribor system*

12.05 – 12.25

4. **Liu Yang, Li Sihai, Xiao Xun** *(Northwestern Polytechnical University, **China**)*
**38** INS-Aided GNSS Spoofing Detection Based on Raw Pseudorange and Carrier Phase Measurements

## POSTER PAPERS [1]

12.25 – 12.45

5. **V.I. Baburov, N.V. Ivantsevich, O.I. Sauta** (*JSC VNIIRA), Scientific and Technical Center Navigator, **Russia**)* Joint Use of Navigation Fields of GNSS and
**5** Ground-Based Landing Systems in Onboard Equipment

6. **I. V. Belokonov** (*Samara State Aerospace University, **Russia**),* **V. A. Borovkov** (*Space Rocket Centre Progress, **Russia***)
**44** Onboard and Ground GNSS Receiver Data Fusion for Increasing Micro/Nano Satellite Positioning Accuracy

7. **S.A. Brodsky, A.V. Nebylov, A.I. Panferov** (*State University of Aerospace Instrumentation, **Russia***)
**103** Measurement Optimization for Optimal Control of Aeroelastic Object Motion

8. **H. Benzerrouk** (*University of Blida, **Algeria***), **A.V. Nebylov** (*International Institute for Advanced Aerospace Technologies of Saint-Petersburg State University of Aerospace Instrumentation, **Russia***)
**104** Square Root High Degree Cubature Kalman Filter with Application to Inertial Sensors Fusion with Low-Orbit Satellite Signals

9. **S.N. Sharov, S.G. Tolmachev** (*JSC «Concern Granit-Elektron», **Russia***)
**134** A Decision Making Algorithm for an Integrated System of UAV Landing on the Moving Ship Gripper

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[1] *The authors of poster papers are given 3 min **at the plenary session** **to present the main idea of the paper** with 1-2 slides, if any; further discussion will continue at the poster boards.*

138 10. **K. Müller, P. Crocoll, G.F. Trommer** (*Karlsruhe Institute of Technology, **Germany***)
Wind Estimation for a Quadrotor Helicopter in a Model-Aided Navigation System

**12.45 – 13.00** **DISCUSSION OF THE POSTER PAPERS**

13.00 – 14.00 LUNCH

Chairmen **Dr. Yu.A. Litmanovich**, Russia
**Dr. J. Mark,** USA

## PLENARY PAPERS

14.00 – 14.20
41 11. **J. Ruppelt, G. F. Trommer** (*Karlsruhe Institute of Technology, **Germany***)
A Performance Demonstration of Stereo Visual Odometry for Outdoor Areas and in Dark Indoor Environments

14.20 – 14.40
94 12. **K. K.Veremeenko, D.A. Antonov, M.V. Zharkov, R.Yu. Zimin, I.M. Kuznetsov, A.N. Pron'kin** (*Moscow Aviation Institute, **Russia***)
An Integrated Fault-Tolerant Computer Vision-Aided Navigation System for an Unmanned Vehicle

## POSTER PAPERS [1]

14.40 – 14.55
10 13. **Yu.V. Bolotin, M. Fatehrad** (*Lomonosov Moscow State University, **Russia***)
Pedestrian Inertial Navigation with Foot Zero Velocity Update

87 14. **A. A. Panyov, A.S. Smirnov, V.V. Kos'yanchuk** (*Navigine corp., **Russia***)
Indoor Navigation Using a Foot-Mounted IMU Aided with Heterogeneous Additional Information

49 15. **V.I. Kortunov, A.A. Molchanov** (*National Aerospace University named after N. Zhukovsky «KhAI», **Ukraine***)
Video Camera Motion Detection According to the Optical Flow

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16. **A.S. Mit'kin, V.A. Pogorelov***(Rostov-on-Don Research Institute of Radio Communication,* ***Russia*****),**
**131** **V.D. Meyerovich, S.V. Sokolov** *(Rostov State Transport University,* ***Russia****)*
Nonlinear Filtering of Vehicle Motion Parameters in an Integrated Navigation System Using Electronic Map Data

**14.55 – 15.15** **DISCUSSION OF THE POSTER PAPERS**

15.15 – 15.40 COFFEE BREAK

## PLENARY PAPER

15.40 – 16.00

17. **A.A. Belash, S.S. Gurevich, G.I. Emel'yantsev, B.E. Landau, S.L. Levin, S.G. Romanenko** (*Concern CSRI Elektropribor, JSC,* ***Russia***), **M.I.Gotsuliak** (*Space*
**102** *Rocket Center Progress,* ***Russia***)
Development and Verification of Calibration Method for ESG-Based Strapdown Attitude Reference System Onboard a Spacecraft

## POSTER PAPERS [1]

16.00 – 16.55

18. **D.A. Bedin, A.G. Ivanov, A.A. Fedotov** (*Institute of Mathematics and Mechanics, Russian Academy of Sciences,* ***Russia****),* **S.A. Ganebny** (*LLC NITA,* ***Russia***)
**48** Package of Algorithms for a Posteriori Determination of Radar Systematic Errors for Several Radars

19. **A.V. Shafranyuk, A.I. Sokolov, P.V. Yukhta, I.V. Pashkevich** (*Concern CSRI Elektropribor, JSC,* ***Russia***)
**106** Use of a Multibeam Echosounder in Submersible Vehicle Positioning

20. **V.A. Tupysev, Yu.A. Litvinenko** (*Concern CSRI Elektropribor, JSC,* ***Russia***)
**111** Comparative Analysis of Different Types of Federated Filters as Applied to the Problems of Navigation Data Processing

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**90** 29. **M.B. Bogdanov, A.V. Prokhortsov, V.V. Savelyev, V.A. Smirnov** (*Tula State University, **Russia***)
Integration of INS Sensors with Different Accuracy and Response Speed Characteristics

**91** 30. **D.V. Stepanov, G.T. Bukia** (*Concern Avrora Scientific and Production Association, JSC, **Russia***)
Maneuvering Target Motion Analysis

**96** 31. **S.G. Chernyi, V.Yu. Budnik** (*Kerch State Maritime Technological University, **Russia***)
Elements of the Introspective Analysis to Evaluate Software in Navigation

**16.55 – 17.20** **DISCUSSION OF THE POSTER PAPERS**

**17.30 – 21.00** **SIGHT-SEEING GUIDED TOUR OF SAINT PETERSBURG**

**TUESDAY, 26 MAY**

## SESSION I INTEGRATED SYSTEMS
(Continued)

Chairmen **Dr. A.V. Sokolov,** Russia
**Prof. G. Trommer**, Germany

## PLENARY PAPERS

9.00 – 9.20
**80** 32. **N.I. Krobka** (*NII PM named after Academician V.I. Kuznetsov, **Russia***), **S.A. Aksenov, S.A. Bober, E.V. Efremova, I. V. Logashina, A.V.Tukmakov, Yu.V. Fedorenko, E.N. Chumatchenko** (*Moscow Institute of Electronics and Mathematics, **Russia***)
Distributed Integrated Navigation Systems for Planetary Defense Tasks Against Asteroids

9.20 – 9.40
**135** 33. **F.S. Dubrovin** (*Far Eastern Federal University, **Russia***), **A.F. Scherbatyuk** (*Institute of Marine Technology Problems, Russian Academy of Sciences, **Russia***)
Development of Algorithms for an Autonomous Underwater Vehicle Navigation With a Single Mobile Beacon: The Results of Simulations and Marine Trials

## POSTER PAPERS [1]

9.40 – 10.00

34. **I.N. Burdinskii, S.A. Otcheskii** (*Pacific National University, **Russia***)
**45** Autonomous Underwater Vehicle Localization Using a Single Transponder Acoustic Positioning System

**13** 35. **E.G. Kharin, I.A. Kopylov, V.A. Kopelovich, A.V. Yasenok** (*M.M. Gromov Flight Research Institute, **Russia***)
Automatic Evaluation of Aircraft Navigation Along Standard Instrument Departure and Arrival Routes

**51** 36. **I.L. Ermolov, A.N. Sukhanov** (*Moscow State University of Technology STANKIN, **Russia),*** **M.M. Knyazkov, A.A. Kryukova,** (*Institute for Problems in Mechanics, Russian Academy of Sciences, **Russia***), **B.I. Kryuchkov, V.M. Usov** (*Yu.A. Gagarin Research and Test Cosmonaut Training Center, **Russia***)
A Sensory Control and Orientation System of an Exoskeleton

**53** 37. **A.A. Frolov, D.S. Pecheritsa** (*VNIIFTRI, **Russia***)
Integration of Test Equipment to Evaluate the INS/GNSS Navigation Equipment Specifications

**67** 38. **Wen Liu, Yingjun Zhang, Xuefeng Yang** (*Dalian Maritime University, **China***)
Research on Pan-Tilt-Zoom Control Methods Based on MEMS Inertial Sensors in an Onboard Video Stabilization System

**10.00 – 10.15** **DISCUSSION OF THE POSTER PAPERS**

10.15 – 10.45 COFFEE BREAK

[1] *The authors of poster papers are given 3 min **at the plenary session** **to present the main idea of the paper** with 1-2 slides, if any; further discussion will continue at the poster boards.*

## SESSION II GRAVIMETRIC SYSTEMS

Chairmen **Dr. A.V. Sokolov,** Russia
**Dr. L.F. Vitushkin,** Russia

### PLENARY PAPERS

10.45 – 11.05 39. **L.F. Vitushkin** (*D.I. Mendeleyev Institute for Metrology (VNIIM), ITMO University, **Russia***)
**132** Current Status of Absolute Gravimetry

11.05 – 11.25 40. **V.G. Peshekhonov, A.V. Sokolov, L.S. Elinson, A.A. Krasnov** (*Concern CSRI Elektropribor, JSC, ITMO University, **Russia***)
**127** A New Air-Sea Gravimeter: Development and Test Results

11.25 – 11.45 41. **Wang Wenjing, Luo Cheng, Xue Zhengbing, Li Dongming, Xing Xiangming, Ma Jie, Zhang Haitao** (*Beijing Institute of Aerospace Control Devices, **China***)
**18** Flight and Marine Test Results for Laser Strapdown Airborne Gravimeter in China

11.45 – 12.05 42. **V.N. Koneshov, V.N. Solovyev, M.N. Drobyshev** (*Schmidt Institute of Physics of the Earth, Russian Academy of Sciences, ITMO University, **Russia**), (Schmidt Institute of Physics of the Earth, Russian Academy of Sciences, **Russia***), **V.B. Nepoklonov** (*Moscow State University of Geodesy and Cartography, **Russia***)
**112** Error Estimation of Earth Gravity Field Anomaly Models by Airborne Gravimetric Surveys

### POSTER PAPERS [1]

12.05 – 12.25 43. **O.A. Stepanov, D.A. Koshaev, A.V. Motorin** (*Concern CSRI Elektropribor, JSC, ITMO University, **Russia***)
**116** Adaptive Filtering in Airborne Gravimetry Problems

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**124** 44. **Yu.L. Smoller, S.Sh. Yurist** (*Gravimetric Technologies, **Russia***), **A.A. Golovan, L.Yu. Yakushik** (*Lomonosov Moscow State University, **Russia***)
Using a Multiantenna GPS Receiver in the Airborne Gravimeter Gt2a for Surveys in Polar Areas

**125** 45. **Yu.V. Bolotin, V.S. Vyazmin** (*Lomonosov Moscow State University, ITMO University, **Russia***)
Multiscale Gravity Anomaly Estimation from Airborne Gravimetry Data Using $l_2$ and Minimax Optimization

**128** 46. **A.V. Sokolov, A.A. Krasnov, L.P. Starosel'tsev, A.N.Dzyuba** (*Concern CSRI Elektropribor, JSC, ITMO University, **Russia***)
A Gyro Stabilization System with Fiber-Optic Gyroscopes for an Air-Sea Gravimeter

**140** 47. **A.V. Loparev, A.N. Dzyuba** (*Concern CSRI Elektropribor, JSC, ITMO University, **Russia***)
Correction Algorithm of Gyro Stabilized System for Airborne Gravimeter

12.25 – 13.00 **DISCUSSION OF THE POSTER PAPERS**

13.00 – 14.00 LUNCH

## SESSION III INERTIAL SYSTEMS AND SENSORS

Chairmen **Prof. I.M. Okon**, Russia, USA
**Prof. H. Sorg,** Germany

### PLENARY PAPER

14.00– 14.20 **4** 48. **D.A. Bordachev, P.A. Ilyushin, B.A. Kazakov, I.E. Shustov, A.A. Volyntsev** (*NII PM named after Academician V.I. Kuznetsov, **Russia***)
Advanced Angular Rate Measurement Device for Spacecraft: Ground Test Results

## POSTER PAPERS [1]

14.20 – 14.55

49. **Yu.N. Chelnokov** (*Institute of Precision Mechanics and Control, Russian Academy of Sciences, **Russia***), **S.E. Perelyaev** (*Moscow Institute of Electromechanics and Automatics, **Russia**), **L.A. Chelnokova** (*Saratov State University, **Russia***)
**15** Ultrafast, Fast and Slow Loops in Orientation Algorithms for Strapdown INS

50. **L.V. Vodicheva, Yu.V. Parysheva, E.L. Alievskaya** *(Semikhatov Scientific Production Association of Automat-*
**60** *ics, **Russia**)*
Prelaunch Alignment and Calibration of a Hybrid Inertial Measurement System: Rotation of a Strapdown Unit about a Horizontal Axis

51. **V.M. Kutovoy, D.A. Kutovoy, O.I. Maslova, S.Yu. Perepelkina, P.V. Sitnikov, A.A. Fedotov**
**61** (*Semikhatov Scientific Production Association of Automat-ics, **Russia***)
Use of Allan Variance for Practical Assessment of Noise Structure of SINS Sensing Elements

52. **I.V. Bychkov, E.I. Druzhinin, Yu.I. Ogorodnikov** (*Institute of Systems Dynamics and Control Theory, Russian*
**113** *Academy of Sciences, **Russia***), **B.B. Belyaev, A.I. Ul'yashin** (*Lavochkin Research and Production Association, **Russia***)
On Kinematic Configuring of Power Gyrosystems

53. **V.A. Illarionov, V.M. Nikiforov** (*Academician Pilyugin Center, **Russia**)*
**114** Some Features of Coordinate Transformation Realization in a Triaxial Gyrostabilizer

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61. **Zhou Yuan, Zhang Jinyun, Yan Lu, Yu Pei** (*Beijing Institute of Aerospace Control Devices, **China***)
Directional Multi-Position Calibration of PIGA of Inertial Platform System

**14.55 – 15.10** **DISCUSSION OF THE POSTER PAPERS**

15.10 – 15.30 COFFEE BREAK

Chairmen **Prof. Yu.V. Filatov,** Russia
**Prof. G. Trommer**, Germany

## PLENARY PAPERS

15.30 – 15.50 62. **C. Negri, E. Labarre, C. Lignon, E. Brunstein, E. Salaün** *(Sagem Defence and Security, **France**)*
**120** A New Generation of IRS with Innovative Architecture Based on HRG for Satellite Launch Vehicles

15.50 – 16.10 63. **A.V. Molchanov** *(Moscow Institute of Electromechanics and Automatics, **Russia**)*, **V.A. Belokurov, M.V. Chirkin, V.I. Koshelev, V.Yu. Mishin, D.A. Morozov** *(Ryazan' State Radio-Engineering University, **Russia**)*
**93** Precision Laser Gyro with a Digital Channel for Quadrature Signal Processing

## POSTER PAPERS [1]

16.10 – 16.45 64. **M.A. Barulina, V.M. Pankratov** (*Institute of Precision Mechanics and Control, Russian Academy of Sciences, **Russia**),* **M.V. Efremov** (*Scientific Production Enterprise ANTARES, **Russia***)
**8** Stress-Strain State of a Fiber-Optic Gyroscope Coil in the Conditions of Nonstationary Periodic Thermal Influence

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73. **A.E. Fedorov, V.A. Zborovsky, D.A. Rekunov, N.V. Uspekhov, N.S. Pleshakov, P. D. Motov**
**108** (*JSC «Ramenskoye Instrument Engineering Plant», **Russia**)*
Mirror Adjustment and Laser Gyroscope Resonator Loss Measurement

74. **Yu.Yu. Broslavets, E.A. Polukeev, A.A. Fomichev** (*Moscow Institute of Physics and Technology State University, **Russia***)
**66**
Deformation of Nonplanar Cavity Optical Circuit in a Laser Gyro and its Effect on Zero Drift

16.45 – 17.10 **DISCUSSION OF THE POSTER PAPERS**

18.30 **DRINK RECEPTION**

**WEDNESDAY, 27 MAY**

## SESSION III INERTIAL SYSTEMS AND SENSORS
(Continued)

Chairmen **Dr. B.S. Rivkin**, Russia
**Mr. L. Camberlein,** France

## PLENARY PAPERS

9.00 – 9.20 75. **N.B. Vavilova, A.A. Golovan, A.V. Kozlov, I.V. Nikitin, A.A. Panyov, N.A. Parusnikov** (*Lomonosov Moscow State University, **Russia**)*,**I.A. Solovykh, S.V. Nikiforov, A.M. Lavyrev, S.V. Morozov, A.V. Afanasyev** (*Orgenergogaz, JSC «Saratovorgdiagnostika», **Russia)***, **I.V. Vesnovskiy, A.V. Konon,**
**82**
**A.A. Laptiev, D.V. Turusikov** (*JSC «Baker Hughes Technologies and Pipeline Service», **Russia***)
A Navigation System of a Pipeline Inspection System for Oil and Gas Pipelines: The Results of the Development and Testing

## POSTER PAPERS [1]

9.20 – 10.20

76. **Ya.I. Binder, A.L. Gutnikov, T.V. Paderina** (*Elektromekhanika, JSC, Concern CSRI Elektropribor, JSC, **Russia***), **S.F. Konovalov, D.V. Mayorov P.G. Rusanov, A.G. Sidorov, V.E. Chulkov** *(Bauman Moscow State Technical University, **Russia**)*
**62** Acoustic Azimuth Correction System of an Inclinometer

**63** 77. **K.O. Baryshnikov, A.I. Balandin** (*NII PM named after Academician V. I. Kuznetsov, **Russia***)
Application of the Empirical Mode Decomposition Method to Gyroscopic Systems by an Example of a Hybrid Inclinometer

**129** 78. **Ya.I. Binder, T.V. Paderina, B.E. Landau** (*Concern CSRI Elektropribor, JSC, **Russia***)
Application of a Gimballess Electrostatic Gyroscope in the Navigation System of an Intelligent Pig for Pipeline Inspection

**2** 79. **B.S. Lunin** (*Lomonosov Moscow State University, **Russia***), **M.A. Basarab, V.A. Matveev, A.V. Yurin** *(Bauman Moscow State Technical University, **Russia**)*, **Ye.A. Chumankin** *(Arzamas Research and Production Enterprise TEMP-AVIA, JSC, **Russia**)*
Resonator Materials for Coriolis Vibratory Gyroscopes

**3** 80. **M.A. Basarab, V.A. Matveev** *(Bauman Moscow State Technical University, **Russia**)*, **B.S. Lunin** (*Lomonosov Moscow State University, **Russia***), **Ye.A. Chumankin** (*Arzamas Research and Production Enterprise TEMP-AVIA, JSC, **Russia**)*
Algorithms and Technologies for Surface Balancing of Hemispherical and Cylindrical Resonator Gyroscopes

**43** 81. **O.V. Bakhmetieva** (*Academician Pilyugin Center, Plant Zvezda, **Russia***), **V.M. Nikiforov, A.K. Kovalev** (*Academician Pilyugin Center, **Russia***)
Influence of a Hysteresis Gyromotor Boost Supply Voltage on the Readiness Time of a Gyro Unit

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## SESSION IV SATELLITE SYSTEMS

Chairmen **Dr. B.V. Shebshaevich**, Russia
**Prof. O.A. Stepanov**, Russia

### INVITED PAPER

10.20 – 11.05 95. **V.V. Pasynkov** *(Research and Production Corporation «Precision Instrument Making Systems», **Russia**)*
Status and Prospects of the Global Precision Navigation Systems (Differential Subsystems with the Global Working Range)

**11.05 – 11.25** **DISCUSSION OF THE POSTER PAPERS**

11.25 – 11.40 COFFEE BREAK

### PLENARY PAPERS

11.40 – 12.00 96. **P.P. Bogdanov, T.V. Primakina** *(Russian Institute of Radionavigation and Time, JSC, **Russia**)*
**74** GLONASS Time Scale

12.00 – 12.20 97. **A.G. Milkovskiy, S.V. Seredin, S.N. Karutin, E.I. Ignatovich, I.A. Zolkin, A.F. Schekutiev** (*TSNIImash, **Russia***)
**99** Lines of Development of Methods and Means of GLONASS SVs Time Scales High Accuracy Synchronization Using Intersatellite Navigation-Link Technologies

12.20 – 12.40 98. **K.L. Kalagireva, B.I. Vassilev** (*Technical University of Sofia, **Bulgaria**)*
**1** Comparative Analysis of the Algorithms for Determination of the EGNOS Performance Indicators

### POSTER PAPERS [1]

12.40 – 12.55 99. **V.I. Baburov, N.V. Vasilyeva, N.V. Ivantsevich** (*JSC VNIIRA, Scientific and Technical Center Navigator, **Russia***)
**12** Analyzing the Information Significance of GNSS

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Constellation Components

**42** 100. **V.V. Lyubimov, S.V. Podkletnova, A.A. Osipov** (*Samara State Aerospace University*, ***Russia***)
Simulating the Process of Microsatellite Angular Velocity Decrease Using Various Laws of Electromagnetic Coil Control

**73** 101. **I.N. Kornilov, E.A. Kornilova, N.V. Ergashev** (*Ural Federal University*, ***Russia***)
Development of a Public Local Differential GLONASS/GPS Subsystem

**97** 102. **N.V. Mikhailov, V.V. Chistyakov** (*RNav Ltd.*, ***Russia***)
Digital Simulator of Future GLONASS Signals

103. **Wang Guodong, Yang Yanguang, Xing Xiangming** *(Beijing Institute of Aerospace Control Devices*, ***China***)
Improved GNSS Receiver Positioning Method Under the Condition of Weak Satellite Geometry

12.55 – 13.10 **DISCUSSION OF THE POSTER PAPERS**

13.10 – 14.15 LUNCH

**14.15 – 14.30** **CLOSING CEREMONY**

**14.30 – 17.00** **PANEL DISCUSSION «Methods for Navigation Sensor Performance Determination»**

**Moderators: Dr. David W. Allan** (*Allan's TIME,* ***USA***)
**Prof. O.A. Stepanov** (*Concern CSRI Elektropribor, JSC, ITMO University*, ***Russia***)

**David W. Allan** (*Allan's TIME,* ***USA***)
Historicity, Strengths, and Weaknesses of Allan Variances and Their General Applications

**79** **N. I. Krobka** *(Federal State Unitary Enterprise "Center for Ground-Based Space Infrastructure Operation" (Branch "Research Institute of Applied Mechanics named after Academician V.I. Kuznetsov"),* ***Russia***)
On the Topology of the Allan Variance Graphs and Typical Misconceptions in the Interpretation of the Structure of the Gyros Noise (Based on the Examples of Reports at the St. Petersburg International Conference on Integrated Navigation Systems)

**O.A. Stepanov** (*Concern CSRI Elektropribor, JSC, ITMO University, **Russia***), **I.B. Chelpanov** (*State Polytechnic University, **Russia***), **A.V. Motorin** (*Concern CSRI Elektropribor, JSC, ITMO University, **Russia***)

**115** Accuracy of Sensor Bias Estimation and its Relationship with Allan Variance

**DISCUSSION**