



MetroAeroSpace 2019

2019 IEEE INTERNATIONAL WORKSHOP ON

Metrology for Aerospace

TORINO, ITALY | JUNE 19 - 21, 2019

CALL FOR PAPERS

for the Special Session on

TERRESTRIAL AND IN-FLIGHT VERIFICATION OF THE GNC SYSTEMS FOR AEROSPACE VEHICLES

ABSTRACT

The session is devoted to research, design and implementation of guidance, navigation, control (GNC) and communication systems for satellites, space flying robots and various aerospace vehicles. New methods and facilities for the ground and flight testing and adjustment of the GNC aerospace systems, including contemporary methods for passive and active fault-tolerant control, are welcomed. For the session some papers will be presented by members of the IFAC (<http://www.ifac-control.org/>) Technical Committee on Aerospace.

TOPICS

- Terrestrial and in-flight verification of onboard devices and instrumental clusters for aerospace GNC systems
- In-flight adjustment of the aerospace GNC and communication systems
- New methods and facilities for testing of the aerospace GNC systems, including modern methods for the passive and active fault tolerant control
- Software for terrestrial and in-flight identification, verification and tuning of the aerospace GNC and communication systems

ABOUT THE CONVENERS

Professor **Yevgeny Somov** was graduated from Tupolev Kazan National Research Technical University, Department of Aerospace Control Systems, Kazan, USSR, in 1972. In 1982 he took his PhD Engineering on automatic control of the aerospace vehicles from Institute of Control Science, USSR Academy of Sciences, Moscow, USSR. During 1984-2003 he was a Head of Research Laboratory «Dynamics of Control Systems» at Institute of System Dynamics and Control Theory, Siberian Branch, Russian Academy of Sciences, Irkutsk, Russia. In 1997 he received the title of Professor on Applied Mathematics from Irkutsk State University. Since 2008, he is a Head of Research Department «Navigation, Guidance and Control» at Samara State Technical University, Samara, Russia. Since 1998, Yevgeny Somov has been a member of the Technical Committee on Aerospace of the International Federation of Automatic Control (IFAC), he is author of about 400 articles published on International Journals and the proceedings of International Conferences.

Professor **Paolo Castaldi** was graduated from the University of Bologna, Department of Electrical, Electronic and Information Engineering, Italy, in 1990. In 1994 he took his PhD in System Engineering from Universities of Bologna, Padova and Firenze, Italy. Since 1998 he has been a Confirmed Researcher at the Department of Electronics, Computer Science, and Systems at the University of Bologna. Since 2012, he had been a research supervisor for several graduate students in information technology, navigation and fault-tolerant flight control for aerospace vehicles. Since 2008, Paolo Castaldi has been a member of the Technical Committee on Aerospace of the International Federation of Automatic Control (IFAC), he is author of about 80 articles published on International Journals and the proceedings of International Conferences.

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