

TIFAC NEWSLETTER

PHONE (+43 2236) 71 4 47 | FAX (+43 2236) 72 8 59 | E-MAIL: SECRETARIAT@IFAC-CONTROL.ORG

www.ifac-control.org

10th IFAC Conference on **Control Applications in Marine Systems, CAMS 2016** Trondheim, Norway 13-16 September 2016

Since 1989 the International Federation for Automatic Control (IFAC) has sponsored a conference on Control Applications in Marine Systems during each triennium. The 10th IFAC Conference on Control Applications in Marine Systems (CAMS 2016) took place in Trondheim, Norway from September 13-16 2016. CAMS returned to Trondheim after 21 years and was organized by the Norwegian University of Science and Technology (NTNU) in cooperation with the Norwegian Society of Automatic Control (NFA), the national member organization (NMO) for Norway in IFAC.

The National Organizing Committee (NOC) was chaired by Asgeir J. Sørensen of the Norwegian University of Science and Technology. The key members of the NOC were Thor I. Fossen and Vahid Hassani. The International Program Committee (IPC) was set up, with Kazuhiko Hasegawa (JP) as chair and Tristan Perez as vice-chair and 20 members from 13 countries.



Dr. Nils Albert Jenssen (NO), one of five CAMS keynote speakers and a member of the event's Industrial Committee

In order to bridge the gap between academia and industry, an Industrial Committee consisting of Nils Albert Jenssen from Kongsberg Maritime, Jann Peter Strand from Rolls-Royce Marine, and Jan Mikalsen from Marine Technologies assisted the NOC and IPC members to organise the conference. The Technical Program Chair and editor of the conference was Vahid Hassani from the Norwegian University of Science and Technology.

The research areas covered by this event are increasingly appreciated and have become enablers for safer, smarter and greener marine systems and operations. The application areas cover important areas for society such as maritime robotics, maritime transportation, offshore oil and gas exploration, fisheries and aquaculture, offshore renewable energy, ocean science, marine mining, coastal infrastructure, tourism, among others. A total of 130 submissions were received and 95 papers were accepted and presented in 19 sessions. Furthermore, the CAMS 2016 had a best paper and a best student paper awards.

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The program included five invited keynote lectures by internationally-recognized experts Prof. John J. Leonard (US), Prof. Jing Sun (US), Prof. Maarja Kruusmaa (EE), Dr. Nils Albert Jenssen (NO) and Prof. Zoran Vukic (HR) in the areas of underwater robotics, bio-inspired underwater intervention robots, power and energy management in marine systems, simultaneous localization and mapping, and dynamic positioning of marine vehicles. This time the conference introduced an industry stream and an industry session to meet and share ideas and experiences on recent achievements, as well as on new perspectives resulting from recent innovations in marine systems.



Prof. Vahid Hassani (NO), **CAMS NOC member**

A very successful tour of the high tech laboratories at MARINTEK and the Marine Technology Centre at Tyholt, Trondheim was arranged by the conference organizers. The pre-conference professional workshop on Marine Robotics took place on 13 September 2016 and was received extremely well by graduate-level and PhD students and researchers.

Submitted by: Prof. Vahid Hassani (NO), CAMS Technical Program Chair

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February 2017

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The IFAC Journals

Automatica

http://www.journals.elsevier.com/ <u>áutomatica</u>

Control Engineering Practice

http://www.journals.elsevier.com/ control-engineering-practice

Engineering Applications of Artificial Intelligence

http://www.journals.elsevier.com/ engineering-applications-ofartificial-intelligence

Journal of Process Control

http://www.journals.elsevier.com/ journal-of-process-control

Annual Reviews in Control

http://www.journals.elsevier.com/ annual-reviews-in-control

Journal on **Mechatronics**

http://www.journals.elsevier.com/ mechatronics

Nonlinear Analysis: Hybrid

Systems
http://www.journals.elsevier.com/ nonlinear-analysis-hybrid-systems

IFAC Journal of Systems & Control

http://www.journals.elsevier.com/ ifac-journal-of-systems-andcontrol

IFAC PapersOnLine

http://www.journals.elsevier.com/ ifac-papersonline



8th IFAC (et al.) Conference on Manufacturing Modelling, Management, and Control, MIM 2016 Troyes, France 28-30 June 2016

The 8th edition of the IFAC MIM conference was organized by the University of Technology of Troyes (UTT). This is the triennial conference of the IFAC technical committee (TC) 5.2 on Manufacturing Modeling for Management and Control. There were 540 participants from 52 countries at the conference.

The MIM 2016 conference was also sponsored by eight other Technical Committees of IFAC: TC 1.3 (Discrete Event and Hybrid Systems), TC 3.2 (Computational Intelligence In Control), TC 4.3 (Robotics), TC 5.1 (Manufacturing Plant Control), TC 5.3 (Enterprise Integration and Networking) TC 5.4 (Large Scale Complex Systems), TC 7.4 (Transportation Systems), and TC 9.1 (Economic, Business and Financial Systems.)

MIM 2016 was co-sponsored by IEEE-France, IIE, IFORS, IFIP, INFORMS, SCS and also supported in France by ROADEF, CNRS GdR RO, and CNRS GdR MACS.



IFAC President Janan Zaytoon with MIM attendee Maxime Chassaing

The city of Troyes is the capital of the Aube department, situated in the new Grand Est region of France. The UTT, established in 1994, is a French institution of higher education. The UTT's core missions are to conduct research, deliver education & training and facilitate technology transfer. Today it is one of the largest engineering schools in France. Over 2,500 students are registered at the UTT, enrolled in undergraduate, postgraduate and doctoral study programs.

The Laboratory of Industrial Systems Optimization (LOSI), a member of Charles Delaunay Institute (UMR CNRS 6281), was the key structure in the organization of this major international event in Manufacturing and Logistics. The LOSI Lab, directed by Prof. F. Yalaoui since 2012, is composed of 36 members including 13 Faculty Members as well as 1 PostDoc, 2 Engineers and 20 Ph.D. Students. Research activities of laboratory are on production and logistics systems, from design to operational management. Organizing the MIM2016 conference was an honor for the LOSI and was considered by the laboratory members as a validation of laboratory visibility and scientific influence in the world.

The national organization committee was led by Dr. A. Yalaoui (Chair), and the participation of Prof. J. Zaytoon (IFAC President and the current representative of the IFAC French NMO), as well as Dr. M. Afsar, Prof. L. Amodeo, Dr. F. Dugardin, Prof. C. Prins and all other LOSI members: Dr. T. Arbaoui, Dr. M. Godichaud, Dr. F. Hnaien, Dr. N. Labadie, Dr. Y. Ouazene, and Dr. C. Prodhan (Award Paper Committee Chair).

The steering committee of MIM 2016 was composed of: Prof. A. Dolgui (chair), Prof. N. Bakhtadze, Prof. O. Gusikhin, Prof. V. Minzu, Prof. L. Monostori, Prof. P. Fleming, Prof. S. Y. Nof and Prof. A. Villa.

The program committee was led by Prof. R. W. Grubbstrom and its vice-chairs: Prof. C. Kahraman, Prof. S. M. Meerkov and Prof. R. Kelly (Vice-chair from industry), as well as the editors: A. Dolgui, D. Ivanov and F. Yalaoui. It received 514 submissions papers from 52 countries, with the most coming from France (187), Italy (49), Russia (41), USA (31), Canada (25), China (22), Germany (20), Algeria (14), Turkey (13), and Brazil (9).

Finally, after a serious peer review process 333 (selection rate of 64%) articles have been selected for presentation at the conference. We would like to emphasize the outstanding program of MIM 2016 with 6 tracks, 76 invited or regular sessions, 2 industrial sessions, 2 poster sessions, several exhibitors and 4 tutorials as well as the exciting plenary talks proposed by:

- Prof. Dr.-Ing. W. Bauer, Director, Fraunhofer Institute for Industrial Engineering IAO, Institute for Human Factors and Technology Management (IAT) at the University of Stuttgart (Germany), Executive Director of Fraunhofer Italia Research s.c.a.r.l.: "Industry 4.0 an Economy based on the Internet of Things"
- Prof. M. Gendreau, Professor of Operations Research at the Department of Applied Mathematics and Industrial Engineering of École Polytechnique de Montréal (Canada): "Transportation, Logistics, and the Environment"
- Prof. S. B. Gershwin, Senior Research Scientist at the MIT Department of Mechanical Engineering (USA): "Engineering and the Design and Operation of Manufacturing Systems"
- Prof. K. E. Stecke, School of Management at University of Texas at Dallas as the Ashbel Smith Professor of Operations Management (USA): "Seru Production System: An Organizational Extension of JIT"
- Prof. X. Xie, distinguished professor of industrial engineering, the head of the department of Healthcare Engineering of the

Center for Health Engineering and the head of IEOR team of CNRS UMR 6158 LIMOS, Ecole Nationale Supérieure des Mines (ENSMSE), Saint Etienne, (France), chair professor and director of the Center for healthcare engineering at the Shanghai Jiao Tong University, (China): "Daily Surgery Scheduling and End-of-the-day Guarantee".

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We really would like to thank the sponsors, some of whom have been involved over the course of many years: the General Council of Aube, the city of Troyes, as well as scientific sponsors: IFAC, IEEE France, IFORS, IIE, IFIP, INFORMS, SCS, CNRS, GdR MACS, GdR RO, SEE, ROADEF, and last, but not least, the main sponsors of this event: Champagne Ardennes Region, NORELEM, and Troyes Hospital Center. Finally, we want to thank Pierre Koch, UTT President, for his unconditional support to organizers of the MIM2016 conference. IFAC MIM 2016 was a very fruitful conference with successful interactions, in the nice city of Troyes with its Middle Ages architecture, its numerous churches and its champagne.

Submitted by: Prof. Farouk Yalaoui, General Chair, Prof. Alexandre Dolgui, Steering Committee Chair, and Dr. Alice Yalaoui, NOC Chair

Obituary: Roberto Tempo Automatica Editor-in-Chief

On 14 January 2017 Roberto Tempo passed away during a skiing excursion at the Alps near his home town in Northwestern Italy. This was devastating news for all of us who knew him, an avid mountaineer and skier, with these activities however coming only second to his devotion to scholarly and professional activities. While being a prolific researcher who had worked in an incredibly diverse set of topical areas (from analysis and control of uncertain systems to social networks), he had also generously given his time to a diverse set of professional activities (from societal and conference to editorial activities).

At the time of his death Roberto Tempo was the Editor-in-Chief of the IFAC Journal *Automatica*, a post he had assumed in January 2015. He was affiliated with *Automatica* since 1992, first as an Associate Editor, then (starting in 1996) as the Editor of the subject area "System and Control Theory", and for 11 years prior to 2015 as Deputy Editor-in-Chief.

Roberto Tempo was born in Cuorgne', Italy, in 1956. In 1980 he graduated in Electrical Engi-

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continued from page 2: Obituary: Roberto Tempo *Automatica* Editor-in-Chief

neering from Politecnico di Torino, Italy. After a period spent at Politecnico di Torino, he joined the National Research Council of Italy (CNR) at the research institute IEIIT, Torino, where he has been a Director of Research of Systems and Computer Engineering since 1991. He has held visiting and research positions at Tsinghua University and Chinese Academy of Sciences in Beijing, Kyoto University, The University of Tokyo, University of Illinois at Urbana-Champaign, German Aerospace Research Organization in Oberpfaffenhofen, and Columbia University in New York.

Roberto Tempo's research activities were mainly focused on the analysis and design of complex networked systems subject to uncertainty, and various related applications within information technology which more recently included the PageRank computation in the Google search engine, distributed localization of wireless sensor networks and opinion dynamics in social networks. On these topics. he published more than 200 research papers in international journals, books and conferences, including a recent paper on belief system dynamics published in Science. He is also a coauthor of the book "Randomized Algorithms for Analysis and Control of Uncertain Systems," Springer, London, published in two editions in 2005 and 2013.



Roberto Tempo was elected a Fellow of the IEEE for "Contributions to Robust Identification and Control of Uncertain Systems" and also elected a Fellow of IFAC for "Contributions to the Analysis and Control of Uncertain Systems, for Pioneering the Probabilistic Approach to Robustness." He was a recipient of the "IEEE Control Systems Magazine Outstanding Paper Award", of the "Automatica Outstanding Paper Prize Award", and of the "Distinguished Member Award" from the IEEE Control Systems Society. He was elected a Corresponding Member of the Academy of Sciences, Institute of Bologna, Italy, Class Engineering Sciences.

In 2010, Roberto Tempo served the IEEE Control Systems Society as President. He was General Co-Chair for the IEEE Conference on Decision and Control, Florence, Italy, 2013 and Program Chair of the first joint IEEE Conference on Decision and Control and European Control Conference, Seville, Spain, 2005. He has served as Editor for Technical Notes and Correspondence of the IEEE Transactions on Auto-

matic Control in 2005-2009 and a Senior Editor of the same journal in 2011-2014. At the time of his death, he was also an Editor at Large of the Asian Journal of Control and a member of the Advisory Board of Systems & Control: Foundations & Applications, Birkhäuser.

Roberto played a leading role for several years in the Italian National Committe of IFAC, of which he was currently serving as the chair. His vision and wisdom have been instrumental in promoting and defining the proposal for an IFAC Congress in Italy. His unselfish help proved to be a key ingredient for the success of the proposal.

Roberto was a universally respected scholar, colleague, and friend, whose untimely departure from this world was a shock to all of us. The loss of Roberto, of his competence, generosity, attention to everybody's needs and concerns, and of his unforgettable smile leave a void in the minds and hearts of everyone who have met him. He will be missed on multiple fronts.

Submitted by Tamer Basar (Editor-in-Chief of the IFAC Journal *Automatica*, 2004-2014, IFAC Publications Committee Chair 2014-2017) and Alberto Isidori (IFAC Advisor, IFAC President 2008-2011).

Editor's Note:

Messages of condolence, as well as memories, photos or anecdotes of Roberto Tempo can be sent to:

roberto.memories@ieiit.cnr.it

IFAC is on social media!
Direct links to IFAC's presence on
Facebook and Twitter can be found
on the IFAC website.

In addition check out the IFAC Blog at http://blog.ifac-control.org/

This Newsletter may be reproduced in whole or in part.

We encourage electronic distribution of this Newsletter, as well as reprinting in national and local automatic control periodicals. Acknowledgement to IFAC would be appreciated.

Introducing the IFAC Major Award Winners 2014-2017

continuation of a series

High Impact Paper Award: Francesco Blanchini (IT)

Franco Blanchini was born on 29 December 1959, in Legnano, Italy. He is the Director of the Laboratory of System Dynamics at the University of Udine (IT.)

Blanchini served as Program Vice-Chairman of the Conference Joint CDC-ECC 2005 in Seville, Spain; Program Vice-Chairman of the Conference CDC 2008 in Cancun, Mexico; Program Chairman of the Conference ROCOND, in Aalborg, Denmark, June 2012 and Program Vice-Chairman of the Conference CDC 2013 in Florence, Italy. He is co-author of the book "Set Theoretic Methods in Control", which is published by Birkhauser.



Blanchini is the recipient of the 2001 ASME Oil & Gas Application Committee Best Paper Award and of the 2002 IFAC survey paper prize for the article "Set Invariance in Control: A Survey" which was published in the IFAC Journal *Automatica* in November 1999. He has been an Associate Editor of *Automatica*, from 1996 to 2006, and of the *IEEE Transactions on Automatic Control*, from 2012 to 2016.

Blanchini is currently an Associate Editor of Automatica and a Senior Editor of the IEEE Control Systems Letters. Additionally he is a member of IFAC TC 2.5 (Robust Control.)

Franco Blanchini wishes to dedicate this High Impact Paper Award prize to the late Roberto Tempo, his invaluable friend and maestro, both in research and in the mountains.

Industrial Achievement Award: Greg Stewart (CA)

Greg Stewart is a Senior Fellow with Honeywell Process Solutions and has worked at Honeywell since 2000. His interests are in developing and deploying advanced control and algorithmic technologies to solve industrial problems. He has led all phases of the research and subsequent development and industrial deployment of technology for several areas including robust paper machine control, microalgae cultivation, and an internal-to-Honeywell startup initiative for automotive powertrain control which was subsequently stood up as new business – Honeywell Automotive Software. He is currently technical lead for Honeywell data



Introducing the IFAC Major Award Winners 2014-2017 continuation of a series

analytics for process industry applications, including the connection between data science and automation.

Stewart holds 33 patents, has published more than 50 technical publications, and his designs reside on over 300 industrial installations. Stewart is a Fellow of the IEEE, received the IFAC Industrial Achievement Award 2017, twice received the IEEE Control Systems Technology Award in 2002 and in 2012, the IEEE Transactions on Control Systems Technology Outstanding Paper Award, an NSERC University-Industry Synergy Award for Innovation, and four Honeywell Technical Achievement awards.



Stewart received a B.Sc. in Physics in 1994 and a M.Sc. in Applied Mathematics in 1996 from Dalhousie University, and a PhD from University of British Columbia in 2000. He served as Adjunct Professor in the Department of Electrical and Computer Engineering at the University of British Columbia from 2000-2010.

Industrial Achievement Award: David Germann (CA)

David Germann received the M.Sc./Dipl. Ing. ETH degree in mechanical engineering from the Swiss Federal Institute of Technology (ETH), Zürich, Switzerland, in 2003. Following graduation he spent a year as a research engineer with the ETH Institute for Dynamic System and Control.



In 2004 Germann joined Fiat Powertrain Technologies in Arbon, Switzerland, where he developed diagnostic test procedures for the automatic fault detection in diesel engine emission treatment devices.

David Germann is currently a Senior Research Engineer with Honeywell Process Solutions. He joined Honeywell in 2008, developing algorithms for modeling and advanced control of automotive powertrain systems with a focus on industrial deployment. He is currently working on the development of machine learning algorithms and data analytics applications in the process industry.

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David Germann is a co-recipient of the 2012 IEEE CSS Control System Technology Award, a Honeywell Technical Achievement Award and the IFAC Industrial Achievement Award 2017. He is certified as a Professional Engineer (P.Eng.) by the Association of Professional Engineers and Geoscientists of British Columbia in Canada.

Introducing the IFAC Fellows 2014-2017

continuation of a series

This continues the series of introducing Newsletter readers to the 2014-2017 IFAC Fellows. The Fellows will receive their certificates and pins at the 2017 IFAC World Congress in Toulouse, FR.

Iven Mareels

Iven Mareels is Dean of the School of Engineering at the University of Melbourne (Melbourne, AU) since 2007. He is a Redmond Barry Distinguished Professor at the University of Melbourne, holding the Chair of Electrical and Electronic Engineering.



He obtained the (ir) Masters of Electromechanical Engineering from Gent University Belgium in 1982 and the PhD in Systems Engineering from the Australian National University in 1987. He became Professor of Electrical Engineering at the University of Melbourne in 1996. He is an Honorary Professor at the National University of Defence Technology, China; and Shanghai Jiao Tong University, China.

Mareels received two civil honours for his work in engineering education and research: Commander in the Order of the Crown (Belgium) in 2013 and the Centenary Medal (Australia) in 2003. His contributions to research as well as education are recognised by inter alia:

- 2015-17 IEEE CSS Distinguished Lecturer
- 2014 IEEE CSS Control Technology Award

- 2013 The Asian Control Association Wook Hyun Kwon Education Award
- 2008 Clunies Ross Medal, Academy of Technological Sciences and Engineering for the automation of large scale water networks
- 2007 Inaugural Vice-Chancellor's Knowledge Transfer Excellence Award from the University of Melbourne, for collaboration with Rubicon Water,
- 2005-06 IEEE CSS Distinguished Lecturer,
- 1994 The Vice-Chancellor's Award for Excellence in Teaching from the Australian National University.

Iven Mareels is a Fellow of the Academy of Technological Sciences and Engineering (ATSE) Australia; The Institute of Electrical and Electronics Engineers (USA), and Engineers Australia. He is a Foreign Member of the Royal Flemish Academy of Belgium for Science and the Arts (KVAB). He is registered as a Corporate Professional Engineer with Engineers Australia. In addition he has served many roles in IFAC, including two terms as an IFAC Vice-President/ Chair of the Technical Board. He was appointed as an IFAC Advisor in 2014.

Mareels serves on a number of boards for industry, academe and in service to the profession. He has extensive experience in consulting for both industry and government. He maintains a strong interest in education and has taught a broad range of subjects in both mechanical and electrical engineering curricula.

As Dean Mareels has introduced the 3+2 model for professional engineering education in 2008. He introduced Eur-Ace® accreditation for the engineering education in 2010. In 2015 Mareels launched the MSE 2025 strategy, which has attracted \$ 400M in infrastructure support funding.

Masao Ikeda

Masao Ikeda is currently the Deputy Director of the Office of Management and Planning at Osaka University, Osaka, Japan. He was with Kobe University, Kobe, Japan from 1973 to 1995. Since 1995, he has been with Osaka University as a Professor of Mechanical Engineering until 2010 and thereafter a Specially Appointed Professor of the university. He was the Vice President for Research Management and Administration from 2013 to 2015.



Ikeda received his bachelor's, master's, and doctoral degrees (all in electrical engineering) from Osaka University in 1969, 1971, and 1975,

respectively. He has been engaged in research in various areas such as stability analysis of nonlinear feedback systems with backlash, control and estimation of linear time-varying systems, overlapping decomposition and control of large-scale systems, control of descriptor systems by a strictly LMI approach, stability analysis of nonlinear systems with equilibria depending on uncertain parameters, and control of linear systems by the direct use of the input

and output data.

Ikeda applied his theoretical knowledge to practical problems, for example, feedforward control of vibration suppression platforms, design of mechanical structures for reduction of vibration transmission, vibration suppression of mechanical transfer systems by jerk control, vibration suppression of high-performance electron microscopes, and dynamic mass measurement of moving vehicles. He has published two books and 150 journal papers, and presented 120 conference papers.

In IFAC, Ikeda has been a member of the NMO Japan since 1997. He was a Vice-Chair of the Technical Committee on Large Scale Complex Systems from 2001 to 2005, and organized the 10th IFAC/IFORS/IMACS/IFIP Symposium on Large Scale Systems: Theory and Applications (LSS 2004) as the General Chair. He served as an Associate Editor for the IFAC Journal Automatica from 1990 to 1996 and the chair or a member of a number of selection committees.

Ikeda has also served in roles for IEEE, the Society of Instrument and Control Engineers (SICE), the Institute of Systems, Control, and Information Engineers (ISCIE), and the Japan Society of Mechanical Engineers (JSME). He was a member of the Board of Governors of the IEEE Control Systems Society in 2002. He was the President of SICE in 2005, and the founding Editor in Chief of the SICE Journal of Control, Measurement, and System Integration (JCMSI) from 2007 to 2011. In addition to being an IFAC Fellow, Ikeda is a Life Fellow of IEEE, an Honorary Member and Fellow of SICE, and a Fellow of JSME.

Yu-Chi (Larry) Ho

Yu-Chi (Larry) Ho received his undergraduate and graduate education from MIT and Harvard University (both U.S.), respectively. For over forty-five years he taught and performed research as a member of the Harvard faculty.



Ho is active professionally in numerous capacities as editor of journals, author of book and paper classics, and received numerous awards. He is a Life Fellow of IEEE, an elected member

of the U.S. National Academy of Engineering and an elected foreign member of the Chinese Academy of Sciences and the Chinese Academy of Engineering.

Since his retirement from Harvard in October 2001, Ho has served part-time as the chief scientist and chaired professor of the Center of Intelligent and Networked Systems at Tsinghua University in Beijing, China. Additionally he has been writing a popular English language blog on Science Net China since 2007.

Alexander L. Fradkov

Alexander L. Fradkov is the head of the Control of Complex Systems Lab of the Institute for Problems in Mechanical Engineering of the Russian Academy of Sciences in St. Petersburg. He is also Professor and Chair of the Department of Theoretical Cybernetics (founded by Vladimir Yakubovich) at Saint Petersburg State University and Professor and Chair of the Department "Control of Complex Systems" at ITMO University in Saint Petersburg.

Fradkov received the diploma degree in mathematics from St. Petersburg State University (SU, now Russia) in 1971 under the supervision of V.A. Yakubovich; the Candidate of Sciences (Ph.D.) degree in Technical Cybernetics in 1975 from Leningrad Mechanical Institute; and the Doctor of Sciences (Habilitation) degree in Control Engineering in 1986 from Leningrad Electrotechnical University.



Fradkov is co-author of more than 600 journal and conference papers, 17 books and textbooks and a holder of ten patents. His research interests include nonlinear and adaptive control, control of oscillatory and chaotic systems, dynamics and control of complex physical systems and networks. In his book "Cybernetical Physics" (Nauka, 2003; published by Springer-Verlag, 2007) an emerging boundary field between physics and control is pioneered. Among his achievements from the 1970s are passification and speed-gradient methods, as well as an approach to analysis and design of discrete stochastic systems based on their approximation by continuous deterministic model (the latter was also developed independently by L. Ljung and H. Kushner under the name 'ODE approach.')

In addition to being an IFAC Fellow Fradkov has been an IEEE Fellow since 2004. He is the founder of the International Physics and Control Society (IPACS) and IPACS President from 2005-2013, a member of the European Control Association (EUCA) since 2014, and a member of the Russian National Committee of Automatic Control since 1998. In addition Fradkov

is a member of the IEEE Control Systems Society Conference Editorial Board (1998–2016), served as Chair of the IFAC TC on Adaptive and Learning Systems during 2008-2011 and 2011-2014, and serves as Editor-In-Chief of the international journal "Cybernetics and Physics," which was launched in 2012.

IFAC Journal of Systems and Control: Now Open for Submissions

The newest addition to the IFAC Journal collection, IFAC Journal of Systems and Control, is now open for submissions. The journal, under the leadership of Editor-in-Chief Robert Bitmead, invites leading researchers in the area of systems and control to submit papers that present significant, novel, generalizable, extensible and transferable innovations across areas of automation and control.

IFAC Journal of Systems and Control will publish high impact papers of broad interest to the community. Four reasons to publish in the journal are to:

- Deliver high quality, ground breaking research with relevance to the broader IFAC community.
- Facilitate interdisciplinary communication across the technical areas of IFAC.
- Benefit from informed high quality peer review by experts.
- Achieve high visibility via Elsevier's platform, ScienceDirect

For the full aims & scope and more information about this new exciting journal please visit the journal homepage: https://www.journals.elsevier.com/ifac-journal-of-systems-and-control. Throughout 2017 papers published in IFAC *Journal of Systems and Control* will be made freely available online on ScienceDirect.

Submit your paper here: http://www.evise.com/evise/jrnl/IFACSC

Submitted by: Dr. Alison Waldron, Elsevier

Check out IFAC's YouTube channel for new and historical IFAC video materials!
The link to the YouTube channel can be accessed via the IFAC website www.ifac-control.org

Approaching Nomination Deadline

IFAC Foundation Award
The nomination deadline has been
extended to: 10 March 2017

Call available on the IFAC Foundation website at:

http://foundation.ifac-control.org/projects/ research-for-society

Calendar of IFAC Events

Title	2017	Place	Further information
Conference on American Control Conference (in cooperation with IFAC) ACC 2017	May 24 – 27	Seattle, WA USA	http://acc2017.a2c2.org/ e-mail: jingsun@umich.edu
20th IFAC World Congress 2017	July 09 – 14	Toulouse France	http://www.ifac2017.org/ e-mail: contact@ifac2017.org
14th INSTICC Conference on Informatics in Control, Automation and Robotics (in cooperation with IFAC) ICINCO 2017	July 26 – 28	Madrid Spain	http://www.icinco.org/ e-mail: icinco.secretariat@insticc.org
SACAC IFAC Conference on Control Conference Africa CCA 2017	December 07 – 08	Johannesburg, South Africa	http://sacac.org.za/pages/cca/ e-mail: cca2017@sacac.org.za
IEEE - CSS, IFAC, SICE, ICROS Conference on Asian Control Conference (in cooperation with IFAC) ASCC 2017	December 17 – 20	Gold Coast Australia	https://www.ascc2017.com/ e-mail: l.vlacic@griffith.edu.au
Title	2018	Place	Further information
9th TU Wien/IFAC Vienna International Conference on Mathematical Modelling MATHMOD 2018	February 21 – 23	Vienna Austria	http://www.mathmod.at/ e-mail: info@mathmod.at
3rd IFAC Conference on Advances in Proportional-Integral-Derivative Control PID 2018	May 09 – 11	Ghent Belgium	http://www.pid18.ugent.be/ e-mail: not yet available
14th IFAC/IEEE Workshop on Discrete Event Systems WODES 2018	May - June 30 – 01	Sorrento Coast - Castellammare di Stabia (NA) Italy	http://wodes2018.unisa.it/ e-mail: not yet available
16th IFAC/IEEE et al. Symposium on Information Control Problems in Manufacturing INCOM 2018	June 11 – 13	Bergamo Italy	http://not yet available e-mail: not yet available
IFAC Workshop on Networked & Autonomous Air & Space Systems NAASS 2018	June 13 – 15	Santa Fe, NM USA	https://sites.google.com/site/naass2018/ e-mail: richardscotterwin@gmail.com
Conference on American Control Conference (in cooperation with IFAC) ACC 2018	June 27 – 29	Milwaukee, WI USA	http://acc2018.a2c2.org/ e-mail: not yet available
18th IFAC/IEEE CSS Symposium on System Identification SYSID 2018	July 09 – 11	Stockholm Sweden	www.ee.kth.se/sysid2018 e-mail: hanna.holmqvist@ee.kth.se
10th IFAC Symposium on Advanced Control of Chemical Processes ADCHEM 2018	July 25 – 27	Shenyang China	http://not yet available e-mail: not yet available
7th CACHE, IFAC Conference on Foundation of Systems Biology in Engineering FOSBE 2018	August 05 – 08	Chicago, IL USA	http://not yet available e-mail: not yet available
10th IFAC/Polish Academy of Sciences Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2018	August 29 – 31	Warsaw Poland	http://safeprocess18.uz.zgora.pl/ e-mail: safeprocess18@uz.zgora.pl
9th IFAC/IEEE CSS Symposium on Robust Control Design ROCOND 2018	September 03 – 05	Florianópolis Brazil	http://rocond18.ufsc.br/ e-mail: rocond18@gmail.com

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