

Organization of the IFAC Council- and Related Meetings

A different style of IFAC meetings in a challenging year

There is always a first time for everything, which was the case for the format of the 2020 IFAC Council- and Related Meetings. Due to the worldwide Covid-19 pandemic the yearly IFAC meetings had to be held virtually, instead of in person in Berlin, DE at the IFAC 2020 World Congress as planned. This took the congress theme of “meeting societal challenges” to an entirely different level than anyone would have predicted or wished for!

It was decided that the annual meetings would be conducted using the Zoom platform. These meetings included the various board and committee meetings, IFAC Council (incoming and outgoing), and the IFAC General Assembly. The IFAC Secretariat arranged the purchase of a Zoom license that could accommodate the number of participants, as well as administrative rights to set up the meetings, allow for lengthier meetings than a free account would allow, etc.

There were many challenges. Usually IFAC officials travel from all corners of the globe to one physical location for the annual meetings. It is the one time in a year when officials have an opportunity to gather for IFAC purposes and encounter friends and colleagues in-person. With the online version the participants were strewn throughout the various time zones. The meetings could only take place during three hours of the afternoon Berlin time, when the majority of participants would be awake, but for some participants taking part in meetings meant very early wakeup times or staying up very late, or a combination of the two. This also meant that the meetings had to be held over the course of three weeks, as not to conflict with the IFAC World Congress, which was also held entirely online. (More information about the virtual IFAC World Congress was published in the August 2020 issue of this Newsletter.)

As the schedule had to change at the last minute due to the emergency nature of the pandemic many participants had to juggle professional and personal responsibilities around the meetings in a time when things are often very different, as the additional dates had to be added long after the original Congress and meeting dates. For example many people have been forced into a work-from-home situation, and often are having to juggle additional responsi-

bilities next to their professional duties (such as caring for family members next to their professional work during the workday) as some regular resources currently are not always available (such as in-person schools, childcare facilities, elder care facilities, summer camps, etc.).

More logistics were required for the organization of the meetings than in normal years. First, the plans were changed to a virtual event from in-person, thus negating months of earlier organizational work and necessitating starting over and communicating this to participants in a timely manner. For example, participants needed to have log-in information for the various meetings. The Secretariat hosted four training sessions for the National Member Organizations (NMOs) in advance of the IFAC General Assembly, to make sure that each NMO could access Zoom and knew how to use the various features required for an online meeting (such as „raising hands“ for speaking permission and the chat for questions, comments, and feedback). There was e-voting in advance of the meeting on issues such as the amendments to the IFAC Constitution, but a voting tool had to be prepared and put in place for votes coming up during the course of the meeting.

“Zoom etiquette” was proposed and established by the IFAC Secretariat. For example, in a in-person IFAC General Assembly there are seats allocated for each NMO, complete with a sign, so it is immediately apparent which NMO representative is speaking. Not everyone knows each NMO representative by name, and especially not in a setting where time is of the essence (the GA gathers once each triennium for a few hours in what is possibly the most important meeting of the triennium). Therefore there had to be consistent naming of each participant which the Secretariat had to manage at the start—for example „France NMO“ as the visible username for the NMO representative from France. Only such representatives had the right to speak/comment during the meeting, in addition to each presenter.

Nothing can ever completely take the place of being present and sharing new experiences and a change of scenery with old friends and colleagues, as well as making new friends and meeting new members of the IFAC community. The Secretariat scheduled a “Zoom Happy

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Automatica

<http://www.journals.elsevier.com/automatica>

Control Engineering Practice

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

Engineering Applications of Artificial Intelligence

<http://www.journals.elsevier.com/engineering-applications-of-artificial-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-and-control>

IFAC-PapersOnLine

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

Hour” where many participants were able to gather in one “place” to catch up with far-flung friends and colleagues.



A screenshot from the “Zoom Happy Hour” in 2020: Gathering virtually instead of in-person due to the Covid-19 pandemic

In addition as no one could personally accept their awards as they would in a typical awards ceremony the Secretariat had to collect postal mailing addresses and separately mail each certificate, medal, and/or plaque, and all during a time where regular international mail services is even now in some cases sometimes not possible, awardees are in a different location than their mailing address on file with the Secretariat, and/or there are significant delays.

Usually after the Council meeting the IFAC community would know when and where the 2021 IFAC Council- and Related meetings would be taking place, and the necessary arrangements would be well underway. At the incoming IFAC Council meeting it was decided to put this decision on hold at least through the end of 2020, when more information about a positive prognosis might be available concerning the Coronavirus situation (such as international travel becoming available again with the opening of more borders, vaccination possibilities, etc.). IFAC officials are requested to approach the situation with flexibility and out-of-the-box thinking in mind. As soon as any decision has been made and information is available it will be publicized and distributed to the IFAC community through the usual communication channels in due course.

Written by: Elske Haberl, IFAC Secretariat

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Introducing the IFAC 2020-2023 Executive Officers

The Executive Officers coordinate and supervise the technical and executive activities of IFAC, in particular those activities in the competence and carried on by the Technical Board, Conference Board, Publications Board and Executive Committees. The President is the Chair of the Executive Officers and legally represents the Federation. In this issue Newsletter readers have the opportunity to learn more about the people responsible for leading IFAC through the 2020-2023 triennium.

IFAC President Hajime Asama

Hajime Asama (JP) received his B.S., M.S., and Dr. Eng in Engineering from the University of Tokyo (JP), in 1982, 1984 and 1989, respectively. He worked at RIKEN (Institute of Physical and Chemical Research) in Japan from 1986 to 2002 as a research scientist, etc. He became a professor of RACE (Research into Artifacts, Center for Engineering) of the University of Tokyo in 2002, a professor of School of Engineering of the University of Tokyo since 2009, and the director of RACE since 2019. He received the RSJ (Robotics Society of Japan) Distinguished Service Award in 2013, and the JSME (The Japan Society of Mechanical Engineers) Robotics and Mechatronics Award in 2009.



He was the chair of CC 7 (Transportation and Vehicles Systems) of IFAC (International Federation of Automatic Control) from 2011 to 2017, and he served as the Chair of the IFAC Committee in the Science Council of Japan, the Japanese IFAC NMO (National Member Organization). In addition, he served as the chair of TC 7.5 (Intelligent Autonomous Vehicles) from 2002. 2005.

H. Asama was the vice-president of RSJ in 2011-2012, an AdCom (Administrative Committee) member of IEEE (The Institute of Electrical and Electronics Engineers) Robotics and Automation Society from 2007-2009, and the president-elect of IFAC from 2017-2020. Currently he is the president of IFAC and since 2014 the president of International Society for Intelligent Autonomous Systems. He is an associate editor of Control Engineering Practice, Journal of Robotics and Autonomous Systems, and Journal of Field Robotics, etc. He served as the director of the Mobiligence (Emergence of adaptive motor function through the body, brain and environment) program in the MEXT (Ministry of Education, Culture, Sports, Sci-

From the IFAC President

I was elected as the IFAC president of the new triennium 2020-2023 at the IFAC General Assembly, which was held in July. It is a great honor for me. Following the custom of established by the immediate IFAC Past President, Frank Allgöwer (DE) during his IFAC presidency, I decided to continue to write this “President’s Column” over the course of this triennium.

I really hope that you, your family, and your friends are all in good health while Covid-19 spreads and many people are infected and dying. Due to COVID-19, most of the IFAC technical events are now being held online, as was the IFAC World Congress 2020. The IFAC World Congress was very successful, and all in thanks to the tremendous efforts of the German team, including Frank Allgöwer, Klaus Janschek, Sandra Hirche, and Rolf Findeisen. I express my deepest appreciation for them and their efforts. I hope all the participants enjoyed the virtual Congress with the new, unusual arrangements.

Although many IFAC technical events are planned for the next year, most of them must unfortunately be online too, or hybrid. It may be not possible for you to meet, talk, have a good meal together, or drink wine in person. But there are many other benefits, and we should make the most of them. For example, it will facilitate the participation of diverse people. Diversity and inclusion is one of the important topics to be promoted in this triennium in IFAC.

It is difficult to predict what will happen in the future and what post-coronavirus society holds for us all. The IFAC World Congress 2023, which is planned to be held in Yokohama, Japan, might be held in hybrid or hyflex format. But I really wish to meet many of you, discuss, and drink together in Yokohama in 2023.

Even though IFAC technical events are restricted from being held physically, other IFAC activities are proceeding as usual, as well as the nomination of TC members (from NMOs). The IFAC Executive Officers are also working to start many items such as the Activity Fund, studying the quality of IFAC technical events, as well as clarifying and unifying the procedures for co-sponsored technical events.

Additionally the IFAC Executive Officers will meet virtually in November 2020. By the end of 2020 we hope to be able to announce information concerning the 2021 IFAC Council and Related Meetings.

The new opportunities will be announced on the IFAC webpage. So, please pay attention to the news on the web.

All the best, and stay safe.

Hajime Asama (JP)
IFAC President 2020-2023

ence and Technology) Grant-in-Aid for Scientific Research on Priority Areas from 2005 to 2009. He was a member of Science Council of Japan from 2014 to 2017. He has served on the IFAC Council since 2017. IFAC council member since 2017. He is a Fellow of IEEE, JSME and RSJ.

He is a member of the Expert Committee on Fuel Removal of NDF (Nuclear Damage Compensation and Decommissioning Facilitation Corporation), a member of technical committee of IRID (International Research Institute for Nuclear Decommissioning), a member of technical committee on mockup testing facility of JAEA (Japan Atomic Energy Agency), the project leader on Disaster Response Robots of COCN (The Council on Competitiveness-Japan), etc.

H. Asama's research interests are service robotics, distributed autonomous robotic systems, embodied-brain systems science, service engineering, human-robot interaction, human interface, disaster response robots, rehabilitation robots, and maintenance engineering.

IFAC President-Elect Dong-II "Dan" Cho

Dong-II "Dan" Cho (KR) is Professor of Electrical and Information Engineering at Seoul National University (SNU) where he is also the Director of Biomimetic Robot Research Center. He has served as the Director of Automation and Systems Research Institute and the Director of Microsystems Technology Center at SNU. He went to Carnegie Mellon University for undergraduate education. He then went to Massachusetts Institute of Technology for graduate studies where he developed nonlinear control methods for integrated engine/powertrain control and received the Ph.D. degree in 1988. He was Assistant Professor at Princeton University (US) in the Department of Mechanical and Aerospace Engineering prior to joining SNU in 1993.



His research interests are in developing and applying new control and mechatronics technologies for motion control, robotics, and sensors. He has authored and coauthored more than 130 international journal articles and more than 40 US and 90 Korean patents. He developed a discrete-time disturbance observer method with sliding mode control to improve performance and robustness, and applied it to high-performance servo systems used in various production systems. He also developed a new silicon technology and applied it to a plethora of medical devices, inertial sensors, and robotic sensors. He was a founder and co-founder of two companies and has served on the board of

directors of six other companies. In recognition of these contributions, he received the Korean Minister of Communications Award (2006), the Institute of Control, Automation and Systems (ICROS) Academic Award (2015), and the Korean Prime Minister's Award (2018).

For professional organizations D. Cho has focused on serving IFAC and ICROS, which is the Korean NMO of IFAC. He was a founding member of ICROS in 1995, and served as the President in 2017. In IFAC, he received the Outstanding Service Award in 2011 for 9 years of services. He continued to serve IFAC as a TB Vice Chair (2011-2014), a Council Member (2014-2017), the Vice-President (2017-2020), and the President-Elect (2020-2023). He also served as a BOG Member of IEEE Control System Society (2017 and 2019), AdCom Member of IEEE Electron Device Society (2006-2012), BOG Member at Large of IEEE Electron Device Society (2012-2020), and Steering Committee Member of International Conferences on Solid-State Sensors, Actuators and Microsystems (2013-2021). He is also an elected member of National Academy of Engineering of Korea since 2009.

D. Cho has served on the editorial board of many international journals, including those published by IFAC (Elsevier), IEEE, ASME, MDPI, and IOP. Currently, he is a Senior Editor of both IEEE Journal of MEMS and IFAC's Mechatronics. He has actively volunteered for organizing conferences, including the 1997 Asian Control Conference (General Secretary), 2005 IFAC World Congress (IPC Vice-Chair), 2006 Transducers (Local Chair), 2008 IFAC World Congress (IPC Chair), 2011 IFAC World Congress (IPC Vice-Chair), 2017 ICROS (General Chair), 2017 ICCAS (General Chair), 2019 IEEE CCTA (Advisory Board), and 2020 IEEE CDC (Advisor).

John Lygeros Vice-President for Finances

John Lygeros (CH) grew up in Athens, Greece. He completed a B.Eng. degree in Electrical and Electronic Engineering in 1990 and an M.Sc. degree in Systems and Control in 1991, both at Imperial College of Science, Technology, and Medicine, London (UK). In 1996 he obtained a Ph.D. degree from the Electrical Engineering and Computer Sciences Department, University of California, Berkeley (US). After a series of postdoctoral researcher appointments, in 2000 he joined the Department of Engineering, University of Cambridge (UK), as a University Lecturer and Churchill College, Cambridge (UK) as a Fellow. Between 2003 and 2006 he was an Assistant Professor at the Department of Electrical and Computer Engineering, University of Patras (GR).

In July 2006 J. Lygeros joined the Department of Information Technology and Electrical Engineering of ETH Zürich (CH), where he currently holds the Chair of Computation and Control and serves as the Head of the Automatic Control Laboratory; in the period 2015-2018 he also served as the Head of the Department of Information Technology and Electrical Engi-

neering. His research concentrates on modeling, analysis, and control of large scale, uncertain systems, with applications to biochemical networks, transportation, energy management and camera networks. He teaches classes in the area of systems and control at both the undergraduate and graduate levels; notable among them is the 4th semester class electrical engineering class on Signals and Systems II, which he delivers in a flipped classroom format and for which he received the Credit Suisse Award for Best Teaching of ETH Zurich.



J. Lygeros is a Fellow of the IEEE, and a member of the IET and of the Technical Chamber of Greece. He has been serving as the Treasurer of IFAC and a member of the IFAC Council since 2013.

Carlos Eduardo Pereira Vice-President for Technical Activities

Carlos E. Pereira received his B.S. and M.S. degrees in Engineering and Computer Science from the Federal University of Rio Grande do Sul (UFRGS) Brazil, in 1987 and 1990 respectively, and the Dr.-Ing. degree in Electrical Engineering from the University of Stuttgart (DE) in 1995. He worked as Group Leader of the Embedded Information Devices Group at United Technologies Research Center (UTRC) from 2000 to 2001 and acted as Director of CETA – Center of Excellence in Advanced Technologies in Brazil from 2002 to 2007. Currently he is a Professor of Industrial Automation at Federal University UFRGS in southern Brazil and also acts as a Director of Operations at EMBRAP II, where he coordinates a network of 61 applied research centers. EMBRAP II is a Brazilian innovation organization, inspired by models such as Fraunhofer from Germany and Catapult from the UK, whose goal is to foster the development of industry-academia collaboration projects.



From 2008 to 2010 C. Pereira was President of the Brazilian Automation Society, the Brazilian IFAC National Member Organization and later became Member and then President of the SBA Council. He has held several IFAC leadership positions, such as TC Chair for the IFAC TC on Manufacturing Plant Control, Vice-Chair of the

TC on Telematics Control, IFAC Council Member (from 2011 to 2017), and Vice -Co-Chair of the IFAC Technical Board and as a member of the IFAC Industry Committee (2017-2020). He was elected IFAC Vice-President for Technical Activities for the triennium 2020-2023. He worked as general co-chair for several IFAC events held in Brazil (WRTP 1997, IMS 1998, IAD 2001, INCOM 2004, and TA 2016). He is an Associate Editor of the IFAC Journals Control Engineering Practice and Annual Reviews of Control and is Deputy Editor-in-Chief of the recently created IFAC Journal of Systems and Control. He has authored more than 400 technical publications in scientific conferences and journals.

C. Pereira's research focuses on methodologies and tool support for the development of distributed real-time embedded systems, with special emphasis on industrial automation applications and the use of distributed objects over industrial communication protocols. He has worked on several research projects in collaboration with industry, mostly dealing with the development of real-time computer-based systems and has contributed to the creation of several spin-off companies. He has been awarded the 2012 Friedrich Wilhelm Bessel Research Award from the Alexander von Humboldt Foundation, the IFAC Outstanding Service Award in 2014 and was the supervisor of the team that won the IEEE President's Change the World Competition in 2011.

Maria Prandini **Vice-President for Conferences**

Maria Prandini (IT) received the Laurea degree cum laude in Electrical Engineering from Politecnico di Milano (1994), and the Ph.D. degree in Information Technology from Università di Brescia (1998), both in Italy. After her Ph.D. studies, she was a visiting postdoctoral researcher at the University of California- Berkeley, from 1998 to 2000. She also held visiting positions at Delft University of Technology (1998), Cambridge University (2000), University of California, Berkeley (2005), and Swiss Federal Institute of Technology, Zurich (2006). In December 2002 she was appointed as Assistant Professor at Politecnico di Milano, where she is currently Full Professor and Chair of the Automation and Control Engineering Study Programme.



Her research interests include randomized methods for system analysis and design; modeling, verification, and control of stochastic and hybrid systems; and distributed and data-based optimization for multi-agent systems. Her research studies are motivated by applications to the transport and energy domains.

M. Prandini has been a member of the editorial boards of leading journals in control as an associate editor (IEEE Transactions on Automatic Control, 2009-2013, IEEE Transactions on Control Systems Technology, 2009-2015, and Nonlinear Analysis: Hybrid Systems, 2011-2015). She is currently an associate editor of the IEEE Transactions on Control of Network Systems and of Automatica. She is currently co-program chair of IEEE Conference on Decision and Control (CDC) 2020 and program chair of IEEE CDC 2021. She was co-chair of the 21st ACM International Conference on Hybrid Systems: Computation and Control (HSCC 2018).

M. Prandini has been contributing to the activities and governance of the IEEE Control Systems Society (CSS) in different roles. She served as IEEE CSS Vice-President for Conference Activities in 2016 and 2017, and as elected member of the IEEE CSS Board of Governors for a three-year term from 2015 to 2017. From 2013 to 2015, she was editor for the CSS Electronic Publications.

She has also been involved in IFAC as appointed member of the IFAC Policy Committee for the term of office 2017 – 2020, and as member of the IFAC Technical Committee on Discrete Event and Hybrid Systems, since 2008.

In 2018 M. Prandini received the IEEE CSS Distinguished Member Award for contributions to stochastic, hybrid, and distributed control systems and outstanding service to the Control Systems Society related to electronic publications and conference activities. In 2019 she has been elevated to IEEE Fellow, effective 1 January 2020, for contributions to stochastic, hybrid and distributed control systems theory.

Dimitri Peaucelle **Vice-President for Operations/ IFAC Secretary**

Dimitri Peaucelle (FR) was born in Leningrad, USSR, in 1974. He obtained his Ph.D. degree in 2000 from Toulouse University. Since 2001 he is a full-time researcher at the French National Center for Scientific Research (CNRS), working at LAAS in Toulouse.



His research interests are in robust control, and extend to convex optimization over linear matrix inequalities (LMIs), periodic systems, positive systems, time-delay systems, static output-feedback design and direct adaptive control. He is also involved in computer-aided control design activities and is the main contributor to the Randomized and Robust Multi-objective Control (R-RoMulOC) Toolbox. He has been involved in several industrial projects with aerospace partners for launcher, aircraft,

and satellite robust control. He is the co-author (with Yoshio Ebihara and Denis Arzelier) of the monograph "S-Variable Approach to LMI-Based Robust Control".

D. Peaucelle has been a member of the IFAC TC2.5 on Robust Control since 2009. He participated in the organisation of IFAC-ROCOND in 2006 and served as General Chair for the 20th IFAC World Congress held in Toulouse in 2017. He was Program Chair for the European Control Conference held (online from Saint Petersburg) in May 2020 and will serve as Program Chair for the 2021 IFAC-ROCOND symposium to be held in Kyoto. He also served as Deputy Editor-in-Chief for IFAC-PapersOnLine from 2015 till 2020. Starting from July 2020 he is IFAC Vice-President for Operations, Secretary and Editor-in-Chief of the IFAC Newsletter.

Sarah Spurgeon **Vice-President for Publications**

Sarah Spurgeon received B.Sc. and D.Phil. degrees from the University of York, York, U.K., in 1985 and 1988, respectively. She has held previous academic positions at the University of Loughborough, the University of Leicester and the University of Kent in the UK. She was appointed as Professor of Engineering at the University of Leicester in 2002 and was Head of their Department of Engineering from 2006-2008. She was Professor of Control Engineering and Head of the School of Engineering and Digital Arts at the University of Kent from 2008-2016. She is currently Professor of Control Engineering and Head of Department of Electronic and Electrical Engineering at University College London.



Her research interests are in the area of control and monitoring using sliding mode techniques and she has published some 270 refereed journal and conference papers, two edited books and two research monographs. She was awarded the Honeywell International Medal for 'distinguished contribution as a control and measurement technologist to developing the theory of control' in 2010 and an IEEE Millennium Medal in 2000. In 2020 she was made an IEEE Fellow.

S. Spurgeon has previously chaired the UK Automatic Control Council, which is the National Member Organisation of the International Federation of Automatic Control. She was an IEEE Distinguished Lecturer for the Control Systems Society for the period 2011-2014 and has also been a member of IFAC Council for the period 2014-2020. She is currently a council member for the European Control Association (EUCA).

Within the UK S. Spurgeon is a Past President of the Institute of Measurement and Control

and past President of the Engineering Professors Council (EPC). She is a Fellow of the Royal Academy of Engineering.

Frank Allgöwer Immediate Past-President

Frank Allgöwer (DE), born in 1962, served IFAC as president for the years 2017-2020. He is a professor in the Mechanical Engineering Department of the University of Stuttgart (DE) and director of the Institute for Systems Theory and Automatic Control (IST). He studied Engineering Cybernetics and Applied Mathematics in Stuttgart and at the University of California at Los Angeles (UCLA) respectively and received his Ph.D. degree from the University of Stuttgart. Prior to his present appointment he held an assistant professorship in the electrical engineering department at ETH Zurich and visiting positions at Caltech, the NASA Ames Research Center, the DuPont Company, the University of California- Santa Barbara and the University of Newcastle in Australia. From 2012 until 2020 F. Allgöwer served in addition as Vice-President of Germany's most important research funding agency, the German Research Foundation (DFG) in Bonn, Germany, and from 2018 until 2020 as Chairman of Germany's National Research Data Infrastructure Initiative (NFDI).



F. Allgöwer's main interests in research and teaching are in the area of systems and control with emphasis on the development of new methods for the analysis and control of non-linear systems, networks of systems, optimization based control and data based control. His application interests span a wide range from chemical engineering via mechatronic systems to systems biology. He has published over 500 scientific articles on his research and received several recognitions including several best paper awards, an IFAC Fellow, the IFAC Outstanding Service Award, the IEEE CSS Distinguished Member Award, the State Teaching Award of the German state of Baden-Württemberg, and the Leibniz Prize, which is the most prestigious award in science and engineering awarded by the Deutsche Forschungsgemeinschaft.

Before becoming its president, F. Allgöwer served IFAC in many positions over the last two decades. Among others he was Editor for IFAC's flagship journal *Automatica* for 13 years, chairman of the IFAC Technical Committee on Nonlinear Systems, Member of IFAC's Policy Committee, Member of the IFAC Council and Chair of the Administration and Finance Committee. Starting in 2020 he is a member of the IFAC Executive Officers in his role as Immediate Past-President.

In addition to his activities within IFAC, F. Allgöwer is also involved in other scientific and

societal organizations. He served, for example, the IEEE Control Systems Society as Vice-president for Technical Activities in 2013/14, was repeatedly a member of IEEE CSS Board of Governors, and has been the chairman of the CSS International Affairs Committee for 2007-2013. In addition he has been a member of the council of the European Union Control Association (EUCA) and a member of the Board of Governors of the VDI/VDE Society for Measurement and Automatic Control. F. Allgöwer has been organizer or co-organizer of more than a dozen international conferences.

18th European Control Conference 2020/ 1st Virtual ECC 12 - 15 May 2020 St. Petersburg, RU

The 18th European Control Conference (ECC 2020, 1st Virtual ECC) was held from 12-15 May 2020 in Saint Petersburg, Russia. The European Control Conferences are organized by the European Control Association (EUCA) and aimed at bringing together a wide variety of specialists in the Systems and Control fields with the purpose to show the latest developments in the respective areas, to exchange experience and to stimulate further interaction. ECC took place since 1991 biannually and since 2013 annually except 2017.

The 2020 local host organization was the ITMO University in St. Petersburg, assisted by the Institute for Problems of Mechanical Engineering of RAS. Alexander Fradkov served as General Chair, Dimitri Peaucelle served as the conference Program Chair, and the conference Editorial Board Chair was Antonella Ferrara. Technical co-sponsorship of the event was provided by the IEEE Control Systems Society (CSS) and the International Federation of Automatic Control (IFAC). Further details can be found on the official web page <https://ecc20.eu/>

Initially it was planned to have about 300 participants since another big event (IFAC 2020) was planned in July 2020. However due to the COVID-19 outbreak many international events were cancelled or postponed till 2021. The organizers faced the force majeure situation and some innovative actions should be taken. In mid-March 2020 it became clear that universities in Russia, as in many other countries, are going to transition to distance/virtual education mode at least for a few months and the only way for ECC'20 to survive is to run it virtually at this time. Fortunately we learned about a couple of successful virtual conferences based on the Zoom platform and decided to proceed in this manner on March 18, less than two months before the start of ECC'20.

There were pros and cons concerning this decision. The main con is that many people planned to visit Saint Petersburg, one of the most beautiful cities in the world, former capital and a historical scientific center of Russia. The organizers arranged a number of guided virtual tours over city and museums and provided a

number of links to existing city and museum tour facilities. The organizers also arranged a virtual banquet in B.Y.O.B. style with a conventional real banquet awards programme and presentation of ECC'21 by ECC'21 General Chair Henk Nijmeijer and discussions on the last day before the closing ceremony. There were eight virtual round tables in eight virtual conference rooms corresponding to eight topical conference tracks. Finally there were 374 registered participants and about 30 guests from 45 countries which is a sign of ECC'20 success.

As for the conference programme, in total, ECC'20 received 600 contributions from 60 different countries. Considering the corresponding authors of these 600 submissions, the top 10 contributing countries were: Russia (88), Germany (73), France (61), China (44), Italy (42), United States of America (36), India (29), Sweden (19), Netherlands (17), United Kingdom (15). In total, 1085 authors and co-authors contributed to the programme. The top 10 contributing countries among these 1085 authors and co-authors are: Germany (158), France (115), Russia (107), USA (89), Italy (84), China (70), Netherlands (52), Sweden (39), India (33) and Spain (29).

Among submissions, 516 were contributed papers, 25 were invited session papers, and 37 were Extended Abstracts. The remaining contribution items are related to the plenaries, workshops, tutorials and the invited session proposals. This reasonable number of contributions, about half the number of submissions at ECC'19, was expected considering that 2020 is also a year with an IFAC World Congress, which is moreover held in Europe.

The ECC' 20 had excellent plenary speakers:

- Eduardo Sontag (Northeastern University, USA): "*Some Control Theory Ideas in Systems and Synthetic Biology*"
- Emilia Fridman (Tel Aviv University, IL): "*Delayed and Sampled-Data Control of ODE and PDE Systems*"
- Vladimir Peshekhonov (Concern CSRI "Elektropribor", St. Petersburg, RU): "*Prospects for Gyroscopy*"
- Stefano Stramigioli (University of Twente, NL): "*Physical Control for Physical Systems: Why and How*"
- Florian Dörfler (ETH Zurich, CH): "*Online Feedback Optimization with Applications to Power Systems*"
- Mazyar Mirrahimi (INRIA, Ecole Polytechnique and Mines Paristech, FR): "*Towards a Fault-Tolerant Quantum Computer*"

The way papers were organized in sessions was partly driven by organizational constraints defined prior to the COVID-19 crisis. The organizers decided to keep the structure even though the conference went fully virtual. The programme was structured in eight parallel tracks each of which composed of six sessions with six presentations (WeA, WeB, ThA, Thb,

FrA, FrB) and two sessions with four presentations (WeC, ThC). Each track was partially specialized. Among the highlights of the programme were the combination of synchronous (via Zoom) and asynchronous (via Paperplaza) viewing, with synchronous discussions (nine synchronous tracks) and the broadcast on the YouTube channel. There was a lunchtime session, which was organized by the ECC'20 sponsor The Mathworks on 15 May.

Submitted by: Alexander L. Fradkov (Saint Petersburg State University & Institute of Problems in Mechanical Engineering, RU) and Dimitri Peaucelle – LAAS-CNRS, Université de Toulouse, CNRS, FR)

An Introduction to Control Engineering Practice and the IFAC Journal Portfolio: A Webinar for Authors and Editors of the Future

For several years submissions to the IFAC journals from researchers in China have increased substantially in both number and quality. Today, China leads on submissions, article downloads and published papers. The editors of the journals, along with the publisher Elsevier (the publisher of all eight IFAC journals), and the Publications Board, recognise the growing significance of control work being conducted in China, and for this reason we organised an outreach event on Tuesday, 29 September 2020 to connect with members of this community.

The workshop was hosted online by Biao Huang, Editor-in-Chief of *Control Engineering Practice*, and Sarah Spurgeon, IFAC Vice-President/Chair of the IFAC Publications Board, and introduced by Kay Tancock, Senior Publisher at Elsevier. The platform was Researcher Academy <https://researcheracademy.elsevier.com/> and the event was promoted widely in advance via WeChat. Two CEP Associate Editors also took part to discuss the role of the AE in detail: Xiao He and Chunhui Zhao. The session lasted for just over an hour and was attended by around 115 people. The attendees were members of the control community who had picked up the publicity or been personally contacted by the presenters. There was an overview of IFAC from Sarah Spurgeon, and Biao Huang set out how the journal operates and what he looks for in good research papers, as well as new reviewers and editors. The attendees were enthusiastic and engaged, with plenty of questions coming in throughout for the presenters.

It was felt that this was a simple but effective way to connect with some of the growing control community in China, and to share experiences and advice on both sides. Suggestions for future workshops are warmly welcomed by the publisher (k.tancock@elsevier.com) – let us know your preferred topics and presenters and we will try to facilitate it!

Submitted by: Kay Tancock
Senior Publisher at Elsevier

Who's Who in IFAC

IFAC Council Member Marga Marcos

Marga Marcos (ES) is Full Professor in Control Engineering at Basque Country University (Bilbao, ES), where she was Vice-Dean of the Faculty of Engineering from 1990 to 1993. She was chairman of the Control Department (1995–2005).

She has authored and co-authored more than 200 technical papers in international journals and conference proceedings. She has acted as the main researcher of more than 80 research projects funded by National and European R&D programs. She has served and already serves on TCs of IFAC (IFAC TC 3.1: Computers for Control) and IEEE (NBCS, ICPS, IA). She was Chair of the IFAC TC Computer for Control (2014–2017), European Control Association Council (2001–2006), the National Organizing Committee of IFAC Spain (1998–2006), Publication Co-Chair for IEEE CDC2005 and General Co-Chair for IEEE ETFA 2010.



Currently M. Marcos serves as Associate Editor for *IEEE T-ASEEH* journal (2020). She is serving as a member of the IFAC Council for the 2020–2023 triennium. She is the Head of the research group “Systems Control and Integration” of the University of the Basque Country (ehu-gcis.org/).

Her main research interests deal with the application of the Model Driven Engineering paradigm to industrial control systems and reconfigurable distributed applications as well the application of Multi-Agent systems in manufacturing.

Editor's Note: The full listing of IFAC Council members for 2020–2023 is available at: <https://www.ifac-control.org/structure/council>

IFAC Email Aliases are available!

Sign up with the address with which you are registered with IFAC at:

<https://hera.ifac-control.org/ifacmail/>

If you need any assistance to complete the process please contact the IFAC Secretariat via email at secretariat@ifac-control.org.

A Letter to IFAC Newsletter Readers from the Editor-in-Chief

Dear IFAC Newsletter Readers,

On the occasion of the IFAC World Congress 2020 in Berlin, I was elected to the new optional office of Vice-President for Operations. As such I will do my best, in coordination with the President Hajime Asama and the other IFAC Executive Officers, to make IFAC as reactive and operational as possible. Task Forces are proposing new features for more value of being an IFAC Affiliate, for more services to IFAC Events organizers, for more inclusion and diversity, for more visibility of Automatic Control successes, and I will serve with the aim of having all the excellent suggestions implemented efficiently.

I was also appointed IFAC Secretary with the role of supervising work of the IFAC Secretariat in Laxenburg, AT. Both positions are complementary, the Secretariat staff being instrumental for implementing and sustaining the IFAC activities. I look forward to the fruitful cooperation with Katharina Willixhofer (Deputy Secretary), Elske Haberl (Office Manager), and Harald Albrecht, (Information Technology Technician). I am very confident in their dedicated and excellent work for IFAC. Let me also praise Kurt Schlacher, who served as IFAC Secretary during the past fifteen years, for the time spent and the quality of his involvement. Secretariat matters are in excellent shape and I thank him for remaining available for good advice in the future.

Finally, the IFAC Secretary traditionally serves as Editor-in-Chief of the *IFAC Newsletter*. I shall hold this position for the upcoming issues, yet it is worth mentioning that a new Task Force has been created at the last incoming IFAC Council: the Newsletter Task Force, which is chaired by Moritz Schulze Darup (DE). It will most probably suggest many great ideas for further developing this publication informing about IFAC. I will be glad to help and assist any transition that may be decided. For any comments, suggestions, submission of articles, etc, please use the new dedicated e-mail address: newsletter@ifac-control.org.

I wish you a pleasant reading of this October 2020 issue of the *IFAC Newsletter*. It opens a series of issues containing presentations of the colleagues appointed to official positions within IFAC for this triennium. It also reports about the hard times and successes when organizing events in COVID-19 pandemic times.

Best regards,

Dimitri Peaucelle (FR)
IFAC Secretary/Vice President for Operations

The IFAC Story E-book (updated version) is available!
ISBN 978-3-902823-73-1

<https://www.ifac-control.org/about/the-ifac-story>

Calendar of IFAC Events

Title	2020	Place	Further Information
12 th INSTICC, IFAC et al. Internat. Joint Conference on Computational Intelligence IJCCI 2020	November 02 – 04	Budapest Hungary	http://www.ijcci.org/ ijcci.secretariat@insticc.org
15 th IFAC Workshop on Discrete Event Systems WODES 2020	November 11 – 13	Rio de Janeiro Brazil	https://wodes2020.eventos.ufrj.br/
ANZCC, IFAC, et al. Conference on Australian and New Zealand Control Conference (in cooperation with IFAC) ANZCC 2020	November 26 – 27	Gold Coast Australia	https://anzcc.org.au/ANZCC2020/ l.vlacic@griffith.edu.au
3 rd IFAC Workshop on Cyber-Physical and Human Systems CPHS 2020	December 03 – 05	Beijing China	http://www.cphs2020.org/
Title	2021	Place	Further Information
International Conference on Automation, XXV Congreso de la Asociación Chilena de Control Automático - ICA ACCA 2020	March 22 – 26	ONLINE Chile	https://controlautomatico.org/ica_acca2020/
Conference on American Control Conference (in cooperation with IFAC) ACC 2021	May 26 – 28	New Orleans, LA USA	http://acc2021.a2c2.org/
17 th IFAC Symposium on Information Control Problems in Manufacturing INCOM 2021	June 07 – 09	Budapest Hungary	https://incom2021.org/ info@incom2021.org
11 th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2021	June 08 – 11	Pafos Cyprus	https://safeprocess2021.eu/
11 th IFAC Symposium on Control of Power and Energy Systems CPES 2021	June 22 – 24	Moscow Russian Federation	https://cpes2021.com/ cpes2021@ipu.ru
16 th IFAC Symposium on Control in Transportation Systems CTS 2021	June 08 – 10	Lille France	https://cts2021.univ-gustave-eiffel.fr/ cts2021@univ-eiffel.fr
11 th IFAC Symposium on Advanced Control of Chemical Processes ADCHEM 2021	June 13 – 16	Venice Italy	https://www.adchem2021.org/ noc@adchem2021.org
Conference on European Control Conference (in cooperation with IFAC) ECC 2021	June/July 29 – 02	Rotterdam Netherlands	https://ecc21.euca-ecc.org/
4 th IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2021	July 05 – 07	Valenciennes France	http://not yet available
7 th IFAC Conference on Analysis and Design of Hybrid Systems ADHS 2021	July 07 – 09	Brussels Belgium	https://sites.uclouvain.be/adhs21/
7 th IFAC Conference on Nonlinear Model Predictive Control NMPC 2021	July 11 – 14	Bratislava Slovakia	https://www.nmpc2021.org/ martin.klauco@stuba.sk
19 th IFAC Symposium on System Identification SYSID 2021	July 14 – 16	Padova Italy	https://www.sysid2021.org/ organizingcommittee@sysid2021.org
4 th IFAC Workshop on Linear Parameter Varying Systems LPVS 2021	July 19 – 20	Milan Italy	http://not yet available

Calendar of IFAC Events

Title	2021	Place	Further Information
6 th IFAC Conference on Engine and Powertrain Control, Simulation and Modeling E-COSM 2021	August 23 – 25	Tokyo Japan	http://not yet available
24 th International Symposium on Mathematical Theory of Networks and Systems (in cooperation with IFAC) MTNS 2020	August 24 – 28	Cambridge United Kingdom	https://mtns2020.eng.cam.ac.uk/erd30@eng.cam.ac.uk
13 th IFAC Symposium on Robot Control SYROCO 2021	August/Sept. 30 – 02	Matsumoto Japan	https://syroco2021.com/
6 th IFAC Workshop on Mining, Mineral and Metal Processing MMM 2021	September 01 – 03	Nancy France	http://not yet available
20 th IFAC Conference on Technology, Culture and International Stability TECIS 2021	September 14 – 17	Moscow Russian Federation	http://not yet available
3 rd IFAC Conference on Modelling, Identification and Control of Nonlinear Systems MICNON 2021	September 15 – 17	Tokyo Japan	http://micnon2021.org/
11 th IFAC Symposium on Biological and Medical Systems BMS 2021	September 19 – 22	Ghent Belgium	https://bms2021.ugent.be/bms2021@ugent.be
6 th IFAC Conference on Analysis and Control of Chaotic Systems CHAOS 2021	September 27 – 29	Catania Italy	http://not yet available
Conference on Control Conference Africa (in cooperation with IFAC) CCA 2021	December 07 – 08	Magalies South Africa	http://not yet available
Title	2022	Place	Further Information
Vienna International Conference on Mathematical Modelling MATHMOD 2022	February 16 – 18	Vienna Austria	http://not yet available
ACA, ICROS, SICE, IFAC et al. Conference on Asian Control Conference (in cooperation with IFAC) ASCC 2022	May 04 – 07	Jeju Island Republic of Korea	http://ascc2021.org/
17 th IFAC Conference on Programmable Devices and Embedded Systems PDES 2022	May 17 – 19	Sarajevo Bosnia and Herzegovina	http://pdes-conference.eu/dejan.jokic@ibu.edu.ba
13 th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2022	June 14 – 17	Busan Republic of Korea	http://not yet available
10 th IFAC Symposium on Robust Control Design ROCOND 2022	August/Sept. 30 – 02	Kyoto Japan	http://rocond21.ee.t.kyoto-u.ac.jp/index.html rocond2021-secretariat@googlegroups.com

The IFAC Calendar of Events is constantly updated as additional technical events (Workshops, Symposia, and Conferences) are approved. Due to the Covid-19 pandemic some events have had date changes, cancellations, etc. since their initial approval. Please check back often for the current status. The complete version of the IFAC Calendar of Events is available online at:


<https://www.ifac-control.org/events/>

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Das Sekretariat der IFAC befindet sich seit 1978 aufgrund eines Übereinkommens mit der Österreichischen Bundesregierung und mit der Österreichischen Akademie der Wissenschaften in Laxenburg und wird derzeit aus Mitteln des Bundesministeriums für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie „BMK“ gefördert.

 Bundesministerium
Klimaschutz, Umwelt,
Energie, Mobilität,
Innovation und Technologie