

IFAC Council- and Related Meetings 2021

This report provides members of the IFAC community the opportunity to learn about the decisions and deliberations undertaken by the IFAC Council at their online-based meetings in July 2021. The IFAC Council is responsible to the General Assembly for the management of the Federation. It receives its mandate from the General Assembly (made up of the IFAC National Member Organizations) and reports to it on the state of the Federation not less frequently than at each Triennial Congress.

The IFAC Council- and Related Meetings 2021 once again had to take place online, as the ongoing pandemic situation was not conducive to international travel for meeting participants from many countries of the world. As the meetings took place for participants living in many time zones the various meetings had to be stretched out over the course of eight days, as they could only be scheduled within a few hours of the afternoon in the CEST time zone, versus an onsite/in-person situation when whole days can be scheduled.

To save time some elements of the meeting were arranged in advance. Denis Dochain and Dawn Tilbury agreed to serve as scrutineers of the Council minutes, and Dimitri Peaucelle and Kristin Pettersen were in charge of overseeing the smooth running of the voting process during the closed meeting session. It was noted with sadness that IFAC Advisor Tibor Vamos (HU), who served as IFAC President from 1981-1984, and was involved in IFAC from the time of its founding, passed away in Budapest in May 2021 at nearly 95 years of age.

IFAC President Hajime Asama was able to report that despite the pandemic IFAC is still active and its activities are ongoing. Preparations are in place for IFAC 2023, and it is hoped that it can be held in-person in Yokohama, JP. He has appointed Dong-il (Dan) Cho to serve as Election Committee Chair, with members Sarah Spurgeon and Carlos Eduardo Pereira.

Concerning Technical Activities and the IFAC Technical Board: Chair Carlos Eduardo Pereira reported on the success of the many technical events which have taken place in the past months, even though they were mostly held remotely (instead of the in-person events that

were originally planned and approved). The events will now be called IFAC Conferences, although the various types of events/conferences will stay the same and the current naming will also remain. There will be a joint task force with the Conference Board to look into the conference fees and provide some guidelines, as some feel that the fees are too high and trending in the wrong direction, despite other developments that could contribute to them becoming less expensive. Additionally, after discussion with the Publications Board, the discussion and dissemination contribution formats will not be mandatory but will be encouraged.

Publications Board: Chair Sarah Spurgeon reported, noting that this is the first triennium in which IFAC's publications activities are at board level. The journals are performing well, with high performance numbers. The first strategic journal reviews have commenced with the first report submitted to the Technical Board chair. Two journals will undergo changes in EIC at the end of 2021, and at that time the respective publications will be reviewed. It was noted that the various reviews have allowed for interaction with TCs relevant to the publications' subject areas.

For the first time the Council heard presentations from NMOs concerning only the proposed locations for the 2029 IFAC World Congress, whereas in the past such presentations covered both the proposed location and IFAC president. After listening to presentations from six NMOs and then deliberating in closed session the Council invited three of the six NMOs to submit a more extensive bid in advance of the 2022 Council meeting, where a final decision concerning the 2029 Congress location will be undertaken. The three NMOs are Italy, the Netherlands, and the United States.

IFAC Awards are proceeding on schedule. In 2022 the Council will have a maximum of 25 new IFAC Fellows to approve, and the Diversity and Inclusion Committee will provide some guidance in an effort to increase the diversity of Fellows. There are a record number of females women serving on the various award search and selection committees. In general, diversity

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December 2021

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Upcoming IFAC Conferences

The IFAC Journals

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>

issues are being considered more and more within the awards process.

IFAC membership currently stands at 48 NMOs. The Membership Committee began the review process of three NMOs, with plans for more reviews in the next year. They proposed, and Council agreed, to allow the Membership Committee to develop an AMO (Associate Member Organization) structure in which countries with fewer financial resources could be included within IFAC without serving as NMOs, paying membership fees, etc., with a progress report to Council at their next meeting. It was noted that in the past losing NMOs was seen as something negative, partly as the number of ordinary Council members was determined by the number of NMOs, but this was adjusted during IFAC's recent structural changes with a set number of 12 ordinary Council members.

Other new programs are in place, including Distinguished Lecturer and Activity Funds Committees. For the former the program is being amended to allow for remote/online lectures, as the pandemic has not allowed for the in-person experiences that were envisioned when the program was first developed. It was noted that some of the recent Activity Fund projects coincide nicely with efforts to bring in new people to IFAC who might not have been able to participate through traditional means (such as those who may not have been able to acquire travel resources for attending in-person conferences).

The Diversity and Inclusion Committee has distributed a survey, and is working to improve on all areas of diversity (not only gender). Together with the IFAC Foundation they will work on some possible new initiatives.

The Database Task Force has been working on finding the right vendor to create a new IFAC database to add additional services and features to the members of the IFAC community. After examining several offers the task force recommended to use the UK-based company Totally, and to keep the task force in place until the database's deployment sometime in 2022. The Education Structure Task Force is looking into ways to improve the structure for educational activities within IFAC. Serious structural changes (such as the possibility of adding an ex officio Education member to Council) would have to be voted on, the IFAC Constitution would require further modifications, and the Election Committee would have to do their work taking such a new structure into consideration. The Council agreed that they approve of the general direction that the task force is studying for later proposals.

An additional new resource for the IFAC community would be IFAC videos, which are being coordinated by the Video Task Force. These would be for both the general public and for an audience of control professionals. It was agreed that scripts should be prepared and sent to the Council for approval.

A Societal Harmony Task Force will be implemented, chaired by Shinji Hara (JP). According to Hajime Asama automatic control is the key

technology to derive the solution to solve societal problems, and the task force would look at many related issues.

Industry Committee: IFAC Council unanimously agreed to approve the Industry Connect webinar series. Dr. Moncef Chioua is to serve as its program manager, and Council agreed for IFAC to provide 4500€ of financial support of this activity.

Operations: Dimitri Peaucelle reported that the Secretariat continues to function well. He noted that several new MOUs have been signed, and asked Council to vote in a 10€ (or equivalent) reduction in fees for all IFAC Affiliates who are IFAC Conference attendees. IFAC would not implement any administrative verification, but it would be a way to advertise the benefit of being an IFAC Affiliate (which is free). Council approved the fee reduction. Additionally, it was approved to hold an online technical lecture in Austria, as the traditional in-person event has not taken place in either 2020 or 2021 due to the pandemic and local restrictions. The annual in-person lecture is traditionally an expression of thanks to the Austrian control community for the association subsidy support that IFAC receives from the Austrian government through their BMK. (This support is acknowledged in the imprint of each issue of this Newsletter.)

Finance: John Lygeros reported. Despite a slight decrease the surplus is still healthy. IFAC generates its funds via membership fees, publications, and some financial income. The Council voted in favor to accept the VP of Finances Report, as well as to indemnify the VP of Finances.

Sustainability and Conference App: Frank Allgöwer reported that the chair plans to step down, although he will remain involved in the Conference App part of the activities. No objections were expressed concerning the recommendations, such as facilitating online participation for major IFAC conferences and meetings. It is hoped to increase the use of the Conference App. As the topics are intertwined it was agreed to combine the two into one Council task force, with the conference app as a subcommittee of the task force.

It is hoped that the pandemic situation will improve in a way that will allow for more typical travel, in-person meetings and gathering opportunities, etc. by next year. In this vein the Council voted to accept an invitation to hold the 2022 IFAC Council- and Related Meetings in London, UK, in July 2022, which will be held in conjunction with the ECC 2022.

Written by: Elske Haberl, IFAC Secretariat

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We encourage electronic distribution of this Newsletter, as well as reprinting in national and local automatic control periodicals.

Acknowledgement to IFAC would be appreciated.

From the IFAC President

Dear IFAC Friends and Colleagues,

The organizers of IFAC 2023 are hard at work making plans and preparations for the 22nd IFAC World Congress, which is planned to be held in Yokohama, Japan from 9- 14 July 2023.

Let me today focus on the call for contributions to the congress. Encouraged by the previous World Congress experiences and by recommendations from the IFAC Technical Board, IFAC 2023 offers a broad range of means to participate. It includes for a start the possibility to submit proposals for pre-congress Tutorials and Workshops. These shall be offered for a limited audience that specifically registers a thorough understanding of the scientific status of precise scientific fields. The Open Invited Track category shall also be implemented at the Congress. It allows for promoting specific research topics with no limitation on the number of contributions and with an open call to encourage a large number of high-quality submissions. It will also be possible to submit proposals for more traditional Invited sessions, limited to six papers and based on personal invitation by the organizers. All these invited tracks and sessions shall appear in the congress program as such and appropriately positioned for high visibility. Special attention will also be paid to sessions dedicated to automatic control demonstrators. A Demonstrator submission category is planned to gather and evaluate accordingly such contributions.

The program committee has approved the following types of submissions on top of the classical regular 6 pages long papers and 12 pages long survey papers. Extended abstract and discussion categories will allow for contributions based on a short submission document (less than 4 pages) at late submission dates. These contributions shall give the opportunity to present at the congress some ongoing research, industrial applications, open issues, new viewpoints, without having the constraint of producing a rigorously reviewed document to be included in IFAC-PapersOnLine proceedings. Finally, the program shall also allow for Dissemination presentations. These presentations are planned to allow dissemination of results that have been accepted recently for publication in IFAC journals. Please check back often at <https://www.ifac2023.org/> (updates will be made by the end of December), and start making plans to participate in what is sure to be a rich and rewarding World Congress!

As 2021 is coming to a close, I am so pleased and proud of all of the hard work put in by so many IFAC volunteers throughout the world. Your efforts are always greatly appreciated, but especially so in this time when many are undergoing additional professional and personal challenges related to the pandemic. I wish you all peace, joy, and good health for 2022.

Best regards, Hajime Asama
IFAC President 2020-2023

IFAC Journal of Systems & Control: Exciting Developments in Progress

In this article readers have the opportunity to learn more about the exciting indexing developments of IFAC's youngest journal, *IFAC Journal of Systems & Control*, which is edited by a team led by Editor-in-Chief Bob Bitmead.

"*IFAC Journal of Systems & Control* publishes high-quality research papers containing generalizable, extensible and transferable innovations across all aspects of the field of control and automation. The journal will only consider submitted papers consisting of significant previously unpublished material germane to applicable Systems Theory, its application, and cognate modeling and feedback-control-related areas of formulation, implementation, and analysis. The Journal is particularly interested in works exploring new areas at the boundary of systems and control where system modeling, estimation and feedback enable new viewpoints, areas of impact, and techniques. The Journal's ambit broadly reflects the areas of interest of IFAC's Technical Board and dovetails with the other IFAC journals in seeking new areas of application and investigation for Systems and Control." (From the Elsevier website)

IFAC Journal of Systems and Control (IFACSC to its friends) has been included into Clarivate's Emerging Sources Citation Index (ESCI) and into Elsevier's Scopus. Clarivate Analytics is the proprietor of Web of Science, which includes the databases; ESCI where IFACSC is currently listed, Science Citation Index, Science Citation Index Expanded, Social Sciences Citation Index. Scopus is the world's largest abstract and citation database of peer reviewed literature. These two citation-indexing services decide to include a journal only after it meets certain metrics and 'validation checks' including article citation rates and other quality measures. Incorporation into these indexes significantly raises the visibility and recognition of IFACSC. So, this is a major step forward for the Journal. But this is still a step.

Now that the Journal is being analyzed according to the procedures of each of these services, its performance is evaluated and compared to other venues in control systems. Clarivate Analytics is the company behind the Impact Factor calculation, which is a measure computed annually reflecting the average number of citations to journal articles. Ultimately, IFACSC should graduate to the Science Citation Index and acquire an Impact Factor.

The importance of joining ESCI and Scopus and eventually gaining admission to SCI and having an Impact Factor, apart from inherently raising the profile of IFACSC, is that many academic organizations themselves rely on these citation metrics in evaluating the publication performance of individuals and organizations. The caliber of the journal is an important as-

pect of the productivity assessment. The appearance of IFACSC in these indexes helps improve the perceived value of the Journal as a well-read place to submit high-quality papers. So, it should improve still further the quality of submissions, the number of papers published, and the service to the readership, in a virtuous circle.

The ab initio Editorial Board has worked hard to garner helpful reviews and to provide serious editorial advice to authors to ensure that those papers passing muster are up to date and communicate new methods clearly. The early focus has been on quality of research, novelty, and clarity. That will not change one whit going forward. But the visibility and attraction of the Journal for authors will definitely increase. Our having reached this stage in the development of the Journal is testament to the diligence and application of the Board members.

Written by Bob Bitmead (IFAC JSC EIC), with input from Kay Tancock (IFAC Elsevier representative)

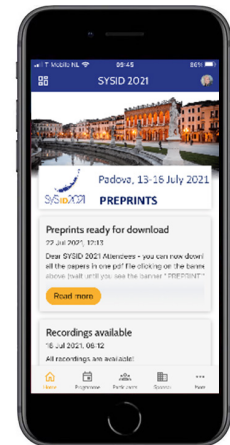
IFAC Conference App: A New Tool for the Conferences of the Future

IFAC Conference App and hybrid meeting support

In the beginning of this year the **IFAC Conference App** was launched as a means to improve the conference experience of both attendees and organizers of IFAC Conferences. The first expected response to this might be: "Why would we need an IFAC app when COVID-19 is preventing us from attending conferences in-person anyway?" Well, actually the IFAC app is just a starting point in the collection of tools for supporting IFAC Conferences in a future where attendees are either attending in-person or online.

The IFAC Conference App runs on all mobile platforms and offers conference attendees access to the program, the abstracts and papers, search facilities, floor plan, a personalized program, interactive sessions, sponsor and exhibition information, connections with social networks, private messages and networking. Every IFAC conference has its separate app which is part of the IFAC Society environment

on your home screen. With one click on the IFAC app-icon on your mobile screen the user will see all IFAC Conferences, and will have access to information to the level that is set by the conference organizer. If you are registered for the conference you will have access to the full functionality of the app. Each individual conference has a web-app version of the tool available for registered participants that is working on desktops/laptops and has the full functionality for the particular conference.



In case of an online conference, the mobile app and web-app allow for integrating links from the sessions to your own virtual event platform, like e.g., Zoom, to host the live streams and recordings and share any content like pre-recordings and slide presentations to registered attendees of the conference. In this case the session links and the access to additional material then simply add to the functionality of the "classical" app and become fully integrated in it.

Based on a Council decision in 2020, the IFAC Conference App is made freely available to all IFAC Conferences held in the triennium 2020-2023, based on a contract with Conference Compass, the company that has developed the IFAC app. The part of the job that relies on the conference organizers is to provide the relevant information in an early stage of the preparations and to appoint one dedicated person in the organization that sets up and operates the app before and during the conference. In the situation of a virtual event, setting up the links to live streams, pre-recordings and slides will require some extra effort, including the collection and storage of pre-recordings and slides.

The IFAC web-app with links to live streams and/or pre-recordings has been effectively

The IFAC Conference App is now available!

The App is paid for by IFAC and can be used free of charge by IFAC conference organizers and attendees. Many IFAC conferences to be included soon!

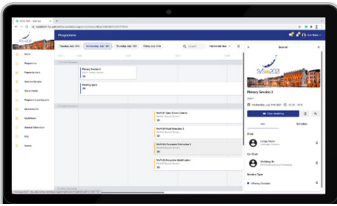
How to download:

App Store <https://apple.co/3mpaER7>

Google Play <https://bit.ly/3lazFjx>

You can also search for 'IFAC' in the Apple App Store or in the Google Play Store.

used in ADCHEM'21 (with StreamYard and VIMEO), ADHS'21, LPVS'21 and LHMNC'21 (all with Zoom) and TDS'21 (with Tencent VooV).



Jie Chen (TDS 2021 IPC Chair) gave the experience of using the IFAC app rave reviews. "At the recommendation of Katharina Willixhofer from IFAC Secretariat, we experimented with the IFAC Conference App Compass for the 16th IFAC Workshop on Time Delay systems, held from 29 September- 1 October 2021. What I found particularly appealing with this platform is that it has the right mix of simplicity and the kind of features, not too fancy but exactly what you need, which makes it very user-friendly and easy to navigate. As an IPC Chair, it was indeed a good experience. It helped a lot for me to track and administer in real time how things were going on. I would definitely recommend conference organizers to try it out."

Jacquelin Scherpen (IFAC Council member) said "I used the IFAC Conference App during the IFAC Lagrangian and Hamiltonian Methods for Nonlinear Control (LHMNLC) workshop in Berlin in October 2021. It was very easy to use, and having the program at hand, including immediate access to the paper from the talk I was in, is a great feature!"

The IFAC Conference App is freely available from the Apple and Google app stores.

Towards a fully integrated system for virtual and hybrid conferences

The COVID-pandemic has boosted the development of tools for supporting virtual and hybrid conferences worldwide, and over the last year we have seen conference organizers trying out different tools, like Zoom, Teams, Vimeo, GatherTown, et cetera.

With Conference Compass (CC), IFAC has a partner that has been developing a full-size solution to supporting virtual and hybrid conferences, allowing the combination of participants attending in-person and attending on-line.

The Virtual Event Platform of Conference Compass is fully cloud-based and integrates the mobile app and desktop computer functionalities. It supports live streams as well as uploading, collecting and streaming pre-recorded video's, live/online panel sessions, poster sessions, etcetera. With cameras installed in the live rooms, it supports both live streaming and showing pre-recorded presentations, servicing both in-person and online attendees. For the

Conference program and access to abstracts and full papers, there is an established link with Papercept. Supported web browsers are Google Chrome and Microsoft Edge, with possible future extensions to Firefox.

The CC Virtual Event Platform has been used for INCOM '21 and SYSID '21 with overall good experiences. For more information on this platform please see <https://www.conferencecompass.com/>

The Virtual Event Platform comes at additional costs. Because of the IFAC-CC contract, IFAC Conference Organizers get a discount on the fees for the platform. The costs for the use of the platform are a fixed price of €3400, including Premium Service, plus a fee that is dependent on the number of participants, ranging from €3.50 to €5.00 per participant per day. Additional budgeting may be required for technical support during the conference. The use of such a platform also requires the appointment of a dedicated person from the organizing team that gets trained to use the CMS and can operate the system.

Support for organizers

There is quite some experience available now with organizing online conferences and there is more detailed information available from the IFAC Secretariat for organizers of future conferences. Organizers that wish to use the Conference Compass App and/or Virtual Event Platform are requested to indicate this in an early stage of their preparations, as at least three months before the Conference arrangements have to be made with Conference Compass if either the Conference App or the Virtual Event Platform are going to be used. Please contact Prof. Ming Cao (ming.cao@gmail.com) in case you would like to opt for this situation.

Even if your conference decides to use another streaming or virtual event platform, we still would strongly encourage organizers to install the freely available IFAC Conference App, so that the Conference becomes visible and accessible in the IFAC society environment. This supports a strong branding of our IFAC activities.

Up-to-date information on the different conference tools is available at: <https://www.ifac-control.org/conferences/conference-app>

The future of IFAC Conferences

While we are all really looking forward to be able to start traveling again and to meet each other during interesting and exciting events, IFAC expects that for a particular group of people, online attendance of Conferences will remain to be an attractive feature. The IFAC Council has confirmed that in its 2021 meeting, by adopting the policy that all major IFAC Conferences in the future are encouraged to facilitate online participation. The motivation for this is twofold. While making our societal contribution to sustainable development and reducing the carbon footprint of our activities, this policy will also allow to attract a new audience of people for which the burden and time investment of international traveling may be too high. This can refer to people from industry, but also to partici-

pants from regions with fewer economic opportunities, thus contributing to stronger diversity within IFAC.

With all advanced tools for online participation, we are nevertheless very much looking forward to having conferences again with in-person attendance!

Written by Paul van den Hof, with contributions from Ming Cao and Katharina Willixhofer (IFAC Conference App Task Force)

IFAC Conference on Technology, Culture and International Stability (TECIS 2021)

14-17 September 2021
Moscow, RU

TECIS 2021 consisted of 141 contributions prepared from 260 authors from 25 countries included three plenary talks, 41 open invited truck papers and 97 regular papers. 30% of the authors were female and approximately 15% were young engineers.

The 20th Conference on Technology, Culture and International Stability (TECIS 2021), which is affiliated with the IFAC TC 9.5 and formerly known as "SWIIS") was organized by the Russian IFAC NMO and took place virtual Technology, Culture and International Stability y based in Moscow at the location where the first IFAC World Congress in 1960 was organized. As usual TECIS 2021 provided a forum for professionals, researchers, experts, and practitioners from industry, non-governmental organizations (NGOs) and academia to give an overview of the state of the art, to present new research results and to exchange ideas and experiences in the field of the role of control and automation technologies and its praxis in promoting international stability.



A related goal of this conference was to propose new approaches in dealing with globalization effects, and investigating international system complexity and the management of knowledge in that context. According to the scope of TECIS, this event offered scientists from Russia and neighbor countries as well as the international research community the opportunity to present their results at an IFAC sponsored international event.

The contributions covered a broad field of subjects including Intelligent Systems and Applications, Innovation Management, AI and Applications, Control and Automation to improve Stability, Engineering Ethics, Cultural Effects,

Knowledge Management and Intelligent Systems, Complex Adaptive Systems, Technology and Environmental Stability, Cost Oriented Automation (COA) and End of Life Management (EoL).

The plenaries were presented by: Petros Groumpos (GR) “*A Critical Historical and Scientific Overview of all Industrial Revolutions*”, Norbert Jesse (DE) “*Data Strategy and Data Trust – Drivers for Business Development*”, Peter Kopacek (AT) & Mary Doyle Kent (IE) “*Selected Development Trends of TECIS*” and Fuad Aleskerov (RU) “*Covid 19 – Spread of Morbidity, Quarantine Measures, Their Efficiency*” (without paper).

Many students, mostly from local universities, attended the event. Out of four finalists for the Young Author Award the paper of Rodrigo Alcobarro (AR) for the contribution “*A Low-Cost Integrated Concept for the Hybridization and Electric Conversion of Cars and Other Mechatronic Vehicles*” was selected for the award by the committee.

We are extremely grateful to the International Program Committee (IPC) members for the reviewing of the papers, the members of the National Organizing Committee (NOC) for the successful organization of the event and especially to all attendees for participating in and contributing to this virtual event. We hope that you enjoyed the familiar atmosphere which stimulated intensive and successful discussions.

Submitted by: Peter Kopacek (AT, TECIS IPC chair) and Zina Avdeeva (RU, TECIS NOC Co-chair)

IFAC Conference on Modelling, Identification, and Control of Nonlinear Systems (MICNON 2021) 15-17 September 2021 Tokyo, JP

Held online from Tokyo, JP the IFAC Conference on Modelling, Identification, and Control of Nonlinear Systems (MICNON 2021) took place from 15- 17 September 2021. The scope of the main conference and the three pre-conference workshops included both theory and application in a good balance. In total, 90 papers authored by 237 authors from 28 countries were presented in 20 sessions of the three-day conference, two of them being invited sessions

This series of conferences has been recognized as one of the major meetings covering nonlinear systems and control. In particular, it has covered various aspects of research on nonlinear dynamics, from modeling to control and their interplay. This conference series has been organized by the IFAC Technical Committee on Non-Linear Control Systems (TC 2.3) tri-annually since 2015. The first conference was held in Saint-Petersburg, Russia. The second conference was held in Guadalajara, Mexico. This third conference had been planned to take place in Tokyo. Unfortunately, due to Novel Cor-

onavirus (COVID-19), the conference did not take the traditional face-to-face format. Instead, this time, the conference was hosted and operated in Tokyo, Japan, and the participants enjoyed the conference program including live Q & A time remotely from their offices and homes. The virtual format allowed 160 participants from 28 countries and regions to join the conference independently of their individual situations.

MICNON 2021 consisted of a three-day conference and one-day tutorial workshops that took place on the 14th of September. At MICNON 2021, three outstanding plenary lectures were presented:

- Frédéric Mazenc (France), “*Two New Stability Analysis Techniques*”
- Jacquelin M. A. Scherpen (The Netherlands), “*Analytical and Data-Based Model Reduction for Nonlinear Systems Based on Differential Balancing*”
- Hyungbo Shim (Republic of Korea), “*Design of Heterogeneous Multi-Agent Systems for Distributed Computation and Control*”

and two inspiring semi-plenary lectures:

- Gianluigi Pillonetto (Italy), “*Kernel-Based Methods in Non-Structured Nonlinear System Identification*”
- Tiago Roux Oliveira (Brazil), “*Extremum Seeking through Partial Differential Equations*”

were delivered. An IFAC Young Author Award was organized. The finalists were Fabio Bonassi, Kiyoshi Hamada, Pietro Lorenzetti, and Anastasios Tzolakis. Their names were announced before the conference. The finalists presented their nominated papers at the conference. The winner of the IFAC Young Author Award of MICNON 2021 was announced during the closing ceremony on Friday, September 17. The winner was Pietro Lorenzetti for his paper titled “*Integral Control of Stable MIMO Nonlinear Systems with Input Constraints*”.

Overall, the program included papers with a variety of topics related to nonlinear control spanning theoretical contributions to both classical and emerging areas as well as interesting applications. In particular it is worth noting that there were a relatively large number of papers that uses techniques from new field such as machine learning in addition to standard nonlinear control theory.

MICNON 2021 was co-sponsored by the IFAC Technical Committee (TC) 1.1 (Modelling, Identification and Signal Processing), TC 1.2 (Adaptive and Learning Systems), TC 2.1 (Control Design), TC 6.1 (Chemical Process Control), TC 8.4 (Biosystems and Bioprocesses), and TC 9.4 (Control Education).

The MICNON 2021 event website can be accessed at: <https://micnon2021.org/>.

Submitted by: Hiroshi Ito, MICNON 2021 NOC Chair (Kyushu Institute of Technology, Japan)

Preliminary Information for IFAC Council- and Related Meetings 2022 11-13 July 2022 London, UK

Preparations for IFAC Council and Related Meetings 2022 are underway!

At the 2021 Council meeting it was decided to hold IFAC’s annual 2022 Council- and Related meetings in conjunction with the ECC 2022 in London, UK at Imperial College’s Electrical Engineering Building, South Kensington Campus, London SW7 2AZ (with the option of remote participation). Due to the ongoing pandemic situation please check often for updates!

Information about the ECC location, travel, information, etc. can be found at: <https://ecc22.euca-ecc.org/>

The First Call was distributed to committee chairs, Council members, Executive Officers, and all relevant IFAC officials. The current meeting schedule can be found on the IFAC website at: <https://www.ifac-control.org/news/ifac-council-meeting-schedule-2022-london>

Travel Information

Accommodation information can be found on the Imperial College website at: <https://www.imperial.ac.uk/visitors-accommodation/local-hotels/>
<https://www.imperial.ac.uk/visit/summer-accommodation/>

Please note that in recent months entry requirements for the United Kingdom have changed. Additionally, Covid-19-related requirements are currently in place, and the situation will most likely undergo many changes by July 2022, so please keep informed of these developments and plan accordingly.

Travel information for entering the UK can be found at: <https://www.gov.uk/uk-border-control/before-you-leave-for-the-uk>

Additional information will be uploaded on the IFAC website in the respective password-protected sections and under documents, as well as on the IFAC Cloud. The remote participation access information will be distributed in advance of the meetings. If you have forgotten your password for the IFAC website or encounter any issues in accessing necessary information, please contact the IFAC Secretariat.

We hope that the situation in July 2022 will allow for many members of the IFAC community to gather in-person in London and be together again with friends and colleagues old and new after two years of online meetings!

To register as an IFAC affiliate or to update your information please use the IFAC affiliate registration form.
[ifac-control.org/about/ifac-affiliate-registration](https://www.ifac-control.org/about/ifac-affiliate-registration)

Calendar of IFAC Conferences

Title	2022	Place	Further Information
7 th ACDOS/IFAC Conference on Advances in Control and Optimization of Dynamical Systems ACODS 2022	February 22 – 25	Silchar, Assam India	http://acods2022.nits.ac.in/ bkr@ee.nits.ac.in
14 th IFAC Workshop on Intelligent Manufacturing Systems IMS 2022	March 28 – 30	Tel-Aviv Israel	https://ws.eventact.com/IMS2022/ yuvalc@afeka.ac.il
16 th IFAC Symposium on Large Scale Complex Systems: Theory and Applications LSS 2022	April 22 – 24	Xi'an China	https://www.ifac1ss2022.com/ yuzhao5977@gmail.com
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
8 th International Conference on Control, Decision and Information Technologies CoDIT 2022	May 17-20	Istanbul Turkey	https://codit2022.com/
2 nd IFAC Workshop on Integrated Assessment Modelling for Environmental Systems IAMES 2022	June 01 – 03	Tarbes France	https://iames2022.sciencesconf.org/ francois.peres@enit.fr
11 th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2022	June 07 – 10	Pafos Cyprus	https://safeprocess2021.eu/
Conference on American Control Conference (in cooperation with IFAC) ACC 2022	June 08 – 10	Atlanta, GA USA	https://acc2022.a2c2.org/
13 th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2022	June 14 – 17	Busan Republic of Korea	http://dycops2022.org/ secretariat@dycops2022.org
6 th IFAC Symposium on Telematics Applications TA 2022	June 15 – 17	Nancy France	http://ta22.cran.univ-lorraine.fr/ ta22-contact@univ-lorraine.fr
11 th IFAC Symposium on Control of Power and Energy Systems CPES 2022	June 21 – 23	Moscow Russian Federation	https://cpes2021.com/ cpes2021@ipu.ru
10 th IFAC Conference on Manufacturing Modelling, Management and Control MIM 2022	June 22 – 24	Nantes France	https://hub.imt-atlantique.fr/mim2022/ contact@mim2022.com
IFAC Workshop on Control for Smart Cities CSC 2022	June 27 – 30	Sozopol Bulgaria	https://csc2022.sai-bg.com/ csc2022bulgaria@gmail.com
14 th IFAC Workshop on Adaptive and Learning Control Systems ALCOS 2022	June/July 29 – 01	Casablanca Morocco	http://www.alcos2022.org/ alcos2022@unicaen.fr
9 th IFAC Conference on Networked Systems NECSYS 2022	July 05 – 07	Zürich Switzerland	https://necsys22.control.ee.ethz.ch/
11 th IFAC Symposium on Intelligent Autonomous Vehicles IAV 2022	July 06 – 08	Prague Czech Republic	http://not yet available
15 th APCA International Conference Automatic Control and Soft Computing CONTROLLO 2022	July 06 – 08	Caparica Portugal	https://controlo2022.deec.fct.unl.pt/ controlo2022@campus.fct.unl.pt

Calendar of IFAC Conferences

Title	2022	Place	Further Information
6 th IFAC Conference on Intelligent Control and Automation Sciences ICONS 2022	July 13 – 15	Cluj-Napoca Romania	https://icons2022.utcluj.ro/ icons2022@conference.utcluj.ro
Conference on European Control Conference (in cooperation with IFAC) ECC 2022	July 13 – 15	London United Kingdom	https://ecc22.euca-ecc.org/ ecc22admin@euca-ecc.org
18 th IFAC Workshop on Control Applications of Optimization CAO 2022	July 18 – 22	Gif sur Yvette France	https://cao2022.sciencesconf.org/
13 th IFAC Symposium on Advances in Control Education ACE 2022	July 24 – 27	Hamburg Germany	https://ace2022.org/ info@ace2022.org
5 th IFAC Workshop on Advanced Maintenance Engineering, Services and Technologies AMEST 2022	July 26 – 29	Bogotá Colombia	https://amest2022.uniandes.edu.co/ amest@uniandes.edu.co
Vienna International Conference on Mathematical Modelling MATHMOD 2022	July 27 – 29	Vienna Austria	https://www.mathmod.at/ mathmod@acin.tuwien.ac.at
19 th IFAC Symposium on Control, Optimization and Automation in Mining, Mineral and Metal Processing MMM 2022	August 15 – 18	Montreal Canada	http://ifacmmm2022.org/ ifac-mmm2022@conferium.com
22 nd IFAC Symposium on Automatic Control in Aerospace ACA 2022	August 22 – 26	Mumbai India	http://not yet available
9 th CACHE/IFAC Conference on Foundations of Systems Biology in Engineering FOSBE 2022	August 28 – 31	Boston (MA) USA	http://fosbe.org/
10 th IFAC Symposium on Advances in Automotive Control AAC 2022	August 29 – 31	Columbus (OH) USA	https://car.osu.edu/AAC2022
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
4 th IFAC Workshop on Control of Systems Governed by Partial Differential Equations CPDE 2022	September 5 – 7	Kiel Germany	https://cpde2022.org/ noc@cpde2022.org
12 th IFAC Symposium on Nonlinear Control Systems NOLCOS 2022	September 6 – 8	Canberra Australia	https://nolcos2022.com/ contact@nolcos2022.com
16 th IFAC Workshop on Discrete Event Systems WODES 2022	September 7 – 9	Prague Czech Republic	https://wodes2022.math.cas.cz/
15 th IFAC Symposium on Analysis Design and Evaluation of Human Machine Systems HMS 2022	September 12 – 16	Santa Clara County (CA) USA	http://not yet available
25 th International Symposium on Mathematical Theory of Networks and Systems (in cooperation with IFAC)	September 12 – 16	Bayreuth Germany	https://www.mtns2022.uni-bayreuth.de mtns2022@uni-bayreuth.de

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

https://www.ifac-control.org/conferences/@@conference_view

Calendar of IFAC Conferences

Title	2022	Place	Further Information
7 th IFAC Conference on Sensing, Control and Automation Technologies for Agriculture AGRICONTROL 2022	September 14 – 16	Munich Germany	http://not yet available
14 th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles CAMS 2022	September 14 – 16	Kgs. Lyngby Denmark	http://not yet available
2 nd IFAC Workshop on Control Methods for Water Resource Systems CMWRS 2022	September 22 – 23	Milan Italy	http://not yet available
13 th IFAC Symposium on Robot Control SYROCO 2022	October 17 – 20	Matsumoto Japan	https://syroco2021.com/
21 st IFAC Conference on Technology, Culture and International Stability TECIS 2022	October 26 – 28	Prishtina Republic of Kosovo	http://not yet available
1 st IFAC Workshop on Control of Complex Systems COSY 2022	November 24 – 25	Bologna Italy	https://eventi.unibo.it/cosy2022 cosy2022@unibo.it

IFAC Fellows and Major Awards: Upcoming Deadlines

Nomination calls and materials for the 2020-2023 IFAC Fellows and IFAC Major Awards (Nichols Medal, Thoma Medal, Quazza Medal, Industrial Achievement Award and High Impact Paper Award) are now available! Nominations and references must be submitted via the PaperCept submission system.

<https://ifac.papercept.net/conferences/scripts/submissionwizard.pl?ConfID=467>

If you do not already have user information for PaperCept you can obtain it by visiting the website <http://ifac.papercept.net/conferences/scripts/start.pl>.

The IFAC Fellow award provides a distinction of excellence in the Federation and is conferred on a triennial basis to a small number of outstanding scientists or engineers. Members of the IFAC Council, Fellow Search Committee or Fellow Selection Committee are not eligible to serve as nominators or references.

IFAC Fellow nominations are due by February 1, 2022. IFAC Fellow references are due by March 1, 2022.

The call for Fellow Nominations, the Nominator Information, as well as the Reference Information are available at the IFAC website at:

<https://www.ifac-control.org/awards/fellow-nominations-2023>

The Nomination Forms and Reference Forms must be submitted via the PaperCept submission system:

<https://ifac.papercept.net/conferences/scripts/submissionwizard.pl?ConfID=467>

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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.

IFAC Technical Lecture Postponement

Due to unforeseeable circumstances the technical lecture “*High-performance nonlinear control method for servo systems in automation and robotics: theory to practice*”, which Prof. Dongil “Dan” Cho, Ph.D. had planned to give on 30 November 2021 was postponed.

IFAC will publicize the new date, registration information, etc. as soon as the lecture can be rescheduled.


Thank you for your understanding.

Season's Greetings

from the IFAC Secretariat!

Please note that the IFAC Secretariat will be closed for the winter holidays from 24 December 2021 through 6 January 2022.

Dimitri Peaucelle (IFAC Secretary/VP
of Operations), Harald Albrecht, Elske
Haberl & Katharina Willixhofer

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