

# 2022 Annual Report (June 2021 – May 2022)

## Nonlinear Circuits and Systems Technical Committee

### IEEE Circuits and Systems Society

Chair: Marco Storace  
 Chair-Elect: Federico Bizzarri  
 Secretary: Erivelton Geraldo Nepomuceno

## 1. Technical Committee/Special Interest Group Meeting(s):

Please provide information on the TC/SiG meetings held in the past year, including date, time, location, attendance rate, and if a quorum was present.

27th May 2021 (virtual)

Attendance rate: 52% (37 out of 71)

Quorum: reached (“whenever voting occurs during a meeting, a quorum applies requiring at least the ceiling of one third of the regular TC members to be present at the meeting”).

8-th June 2022 (scheduled, virtual)

To be held

## 2. Voting Members (67):

First Name	Last Name	Affiliation	Email	IEEE Grade	IEEE Region
Isaac Palliath	ABRAHAM	Intel Corporation	isaac.abraham@intel.com	IEEE Senior Member	R6
Tommaso	ADDABBO	University of Siena	addabbo@dii.unisi.it	IEEE Member	R8
Federico	BIZZARRI	Politecnico di Milano	federico.bizzarri@polimi.it	IEEE Senior Member	R8
Elena	BLOKHINA	University College Dublin	elena.blokhina@ucd.ie	IEEE Senior Member	R8
Sergio	CALLEGARI	University of Bologna	sergio.callegari@unibo.it	IEEE Senior Member	R8
Guanrong (Ron)	CHEN	City University of Hong Kong	gchen@ee.cityu.edu.hk	IEEE Life Fellow	R10
Chi Tsun (Ben)	CHENG	RMIT University	ben.cheng@rmit.edu.au	IEEE Senior Member	R10
Alessandro	COLOMBO	Politecnico di Milano	alessandro.colombo@polimi.it	IEEE Senior Member	R8
Daniilo	COMMINELO	Sapienza University of Rome	daniilo.comminiello@uniroma1.it	IEEE Senior Member	R8
Fernando	CORINTO	Politecnico di Torino	fernando.corinto@polito.it	IEEE Senior Member	R8
He	DI	Shanghai Jiao Tong University	dihe@sjtu.edu.cn	IEEE Senior Member	R10
Mario	DI BERNARDO	Università degli Studi di Napoli Federico II	mario.dibernardo@unina.it	IEEE Fellow	R8
Manuel	DOMINGUEZ-PUMAR	Technical University of Catalonia	manuel.dominguez@upc.edu	IEEE Senior Member	R8
Abdelali	EL AROUDI	Universitat Rovira i Virgili	abdelali.elaroudi@urv.cat	IEEE Senior Member	R8
Ahmed	ELWAKIL	University of Sharjah	elwakil@ieee.org	IEEE Senior Member	R8
Orla	FEELY	University College Dublin	orla.feely@ucd.ie	IEEE Fellow	R8
Davide	FIORE	Università degli Studi di Napoli Federico II	davide.fiore@unina.it	Member	R8

Dimitri	GALAYKO	Université Pierre et Marie Curie	dimitri.galayko@lip6.fr	IEEE Member	R8
Zbigniew	GALIAS	AGH-University of Science and Technology	zbigniew.galias@agh.edu.pl	IEEE Senior Member	R8
Damian	GIAOURIS	Newcastle University	damian.giaouris@newcastle.ac.uk	IEEE Member	R8
Marco	GILLI	Politecnico di Torino	marco.gilli@polito.it	IEEE Fellow	R8
İzzet Cem	GÖKNAR	İşik University	cem.goknar@isikun.edu.tr	IEEE Life Fellow	R8
Michael	GREEN	University of California Irvine	mgreen@uci.edu	IEEE Senior Member	R6
Brendan	HAYES	Dublin City University	brendan.hayes@dcu.ie	IEEE Member	R8
Ho-Ching (Herbert)	IU	The University of Western Australia	herbert@ee.uwa.edu.au	IEEE Senior Member	R10
Alex Pappachen	JAMES	Indian Institute of Information Technology and Management	a.james@iiitm.ac.in	IEEE Senior Member	R10
Amit	JHA	Integrated Device Technology	ajha@ieee.org	IEEE Senior Member	R6
Guo-Ping	JIANG	Nanjing University of Posts & Telecommunications	jianggp@njupt.edu.cn	IEEE Senior Member	R10
Michael Peter	KENNEDY	University College Dublin	peter.kennedy@ucd.ie	IEEE Fellow	R8
Géza	KOLUMBAN	Pázmány Péter Catholic University	kolumban@itk.ppke.hu	IEEE Fellow	R8
Francis	LAU	Hong Kong Polytechnic University	francis-cm.lau@polyu.edu.hk	IEEE Fellow	R10
Adrian	LEUCIUC	Cadence Design Systems	aleuciuc@cadence.com	IEEE Senior Member	R2
Henry	LEUNG	University of Calgary	leungh@ucalgary.ca	IEEE Fellow	R7
Xiang	LI	Fudan University	lix@fudan.edu.cn	IEEE Senior Member	R10
Daniele	LINARO	Politecnico di Milano	daniele.linaro@polimi.it	IEEE Member	R8
Wing-Kuen	LING	Guangdong University of Technology	yongquanling@gdut.edu.cn	IEEE Senior Member	R10
Matteo	LODI	University of Genoa	matteo.lodi@unige.it	IEEE Member	R8
Ahmed	MADIAN	Nile University	amadian@nu.edu.eg	IEEE Senior Member	R8
Wolfgang	MATHIS	Leibniz University Hannover	mathis@tet.uni-hannover.de	IEEE Fellow	R10
Dinesh	MEHTA	Colorado School of Mines	dmehta@mines.edu	IEEE Senior Member	R5
Riccardo	MEUCCI	National Institute of Optics - National Research Council of Italy	riccardo.meucci@ino.cnr.it	IEEE Senior Member	R8
Erivelton Geraldo	NEPOMUCENO	Federal University of São João del-Rei	nepomuceno@ufsj.edu.br	IEEE Senior Member	R9
Yoshifumi	NISHIO	Tokushima University	nishio@ee.tokushima-u.ac.jp	IEEE Senior Member	R10
Maciej J.	OGORZALEK	Jagiellonian University	Maciej.Ogorzalek@uj.edu.pl	IEEE Fellow	R8

Alberto	OLIVERI	University of Genoa	alberto.oliveri@unige.it	IEEE Member	R8
Fabio	PARESCHI	Politecnico di Torino	fabio.pareschi@polito.it	IEEE Senior Member	R8
Marcus	PROCHASKA	Ostfalia University of Applied Sciences	m.prochaska@ostfalia.de		R8
Costas	PSYCHALINOS	University of Patras	cpsychal@upatras.gr	IEEE Senior Member	R8
Ahmed	RADWAN	Nile University	agradwan@nu.edu.eg	IEEE Senior Member	R8
Zhihai	RONG	University of Electronic Science and Technology of China	rongzh@163.com	IEEE Member	R10
Hiroo	SEKIYA	Chiba University	sekiya@faculty.chiba-u.jp	IEEE Senior Member	R10
Neslihan Serap	SENGOR	Istanbul Technical University	sengorn@itu.edu.tr		R8
Gianluca	SETTI	Politecnico di Torino	gianluca.setti@polito.it	IEEE Fellow	R8
Francesco	SORRENTINO	University of New Mexico	fsorrent@unm.edu	IEEE Senior Member	R6
Marco	STORACE	University of Genoa	marco.storace@unige.it	IEEE Senior Member	R8
Jitao	SUN	Tongji University	sunjt@sh163.net		R10
Kangkang	SUN	Harbin Institute of Technology	angkangsun2010@gmail.com	IEEE Member	R10
Johan	SUYKENS	Katholieke Universiteit Leuven	johan.suykens@esat.kuleuven.be	IEEE Fellow	R8
Krishnaiyan	THULASIRAMAN	University of Oklahoma	thulasi@ou.edu		R6
Ljiljana	TRAJKOVIC	Simon Fraser University	ljilja@cs.sfu.ca	IEEE Life Fellow	R7
Chi Kong (Michael)	TSE	Hong Kong Polytechnic University	cktse@ieee.org	IEEE Fellow	R10
Tetsushi	UETA	Tokushima University	ueta@tokushima-u.ac.jp	IEEE Senior Member	R10
Yoko	UWATE	Tokushima University	uwate@ee.tokushima-u.ac.jp	IEEE Senior Member	R10
Jiajing	WU	Sun Yat-sen University	wujiajing@mail.sysu.edu.cn	IEEE Senior Member	R10
Yongxiang	XIA	Zhejiang University	xiayx@ieee.org	IEEE Senior Member	R10
Mustak Erhan	YALCIN	Istanbul Technical University	mustak.yalcin@itu.edu.tr	IEEE Senior Member	R8
Wei Xing	ZHENG	University of Western Sydney	w.zheng@uws.edu.au	IEEE Fellow	R10

#### Note

On April 30, 2022, a new TC member has been admitted to the NCAS TC as a regular (i.e., voting) member:

Alejandro Jose Rojas Norman, Universidad de Concepción (Chile), [arojasn@udec.cl](mailto:arojasn@udec.cl), IEEE Senior Member, R9.

The following percentages are computed before (in black) and after (in red) his admission.

Geographical distribution of TC members (percentage of total)

	2022
Total number of TCs	%
Regions 1 – 6 (U.S.A.)	10.5 10.4
Region 7 (Canada)	3.0 2.9
Region 8 (Europe/Africa, Middle East)	53.7 52.9
Region 9 (Central/South America)	1.5 2.9
Region 10 (Asia/Pacific)	31.3 30.9

Gender distribution of TC/SIG members (percentage of total)

	2022
Total number of TCs	%
Male	91.0 91.2
Female	9.0 8.8

Distribution of TC/SIG members by affiliation (percentage of total)

	2022
Total number of TCs	%
Academia	95.5 95.6
Industry	4.5 4.4
Government	0.0 0.0

### 3. Accomplished Technical Activities

#### 3.1. IEEE Conference/Event organizations

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Isaac Abraham	IEEE CAS	ISCAS 2022	Track Co-chair for track 9 - Nonlinear Systems and Circuits Theory
Elena Blokhina	IEEE CAS	ICECS 2021	Tutorial Co-Chair
Elena Blokhina	IEEE CAS	ISICAS 2021	Technical Program Co-Chair
Chi-Tsun (Ben), Cheng	IEEE CAS	19th International SoC Design Conference (ISOCC 2022)	Publication Chair
Matteo Lodi	IEEE CAS	ISCAS 2022	Track Co-chair for track 9 - Nonlinear Systems and Circuits Theory
Ahmed Madian	IEEE CAS	ICECS 2021	Entrepreneurial Program Chair
Yoshifumi Nishio	IEEE CAS	ISICAS 2021	International Advisor
Costas Psychalinos	IEEE CAS	Conference on Modern Circuits and Systems Technologies (MOCASST),	Technical Program Committee
Hiroo Sekiya	IEEE CAS	The 19th International SoC Conference (ISOCC 2022)	Special Session Chair
Yoko Uwate	IEEE CAS	ICECS 2021	International Committee

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Ahmed Elwakil	IEEE CAS	NILES 2021	International Liaison
Ahmed Madian	IEEE CAS	CAS Emerging and Selected Topics for Industry Forums (CASIF) 2021 ( <a href="https://attend.ieee.org/casif-sumi-2021/">https://attend.ieee.org/casif-sumi-2021/</a> ), jointly organized by Egypt and Lebanon CAS chapters	Co-Organizer
Ahmed Madian	IEEE CAS	ICM 2021	Program Co-Chair
Ahmed Madian	IEEE CAS	NILES 2021	Program Co-Chair
Riccardo Meucci	IEEE CAS	COMPENG 2022	General Co-Chair
Costas Psychalinos	IEEE CAS	NILES 2021	International Liaison
Ahmed Radwan	IEEE CAS	NILES 2021	General Co-chair

### 3.2. IEEE Journal Editorships:

(Please highlight the journals that are (co-)sponsored by the CAS Society, cf., <https://iee-cas.org/publications>)

Your Name	Journal Sponsors	Journal Title	Your Role
Federico Bizzarri	IEEE CAS	IEEE Open Journal of Circuits and Systems	Associate Editor
Elena Blokhina	IEEE CAS	IEEE Transactions on Circuits and Systems I	Associate Editor-In-Chief (until Dec. 2021)
Chi-Tsun (Ben), Cheng	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Chi-Tsun (Ben), Cheng	IEEE CAS	IEEE Circuits and Systems Society Newsletter	Associate Editor
Chi-Tsun (Ben), Cheng	IEEE CAS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Abdelali El Aroudi	IEEE CAS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor in Chief - Power and Energy
Dimitri Galayko	IEEE CAS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Zbigniew Galias	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Herbert Ho-Ching lu	IEEE CAS	IEEE Journal on Emerging and Selected Topics in Circuits and Systems	Editor-in-Chief
Herbert Ho-Ching lu	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Herbert Ho-Ching lu	IEEE CAS	IEEE Transactions on Network Science and Engineering	Associate Editor
Alex James	IEEE CAS	IEEE Transactions on Circuits and Systems I	Associate Editor
Xiang Li	IEEE CAS	IEEE Transactions on Network Science and Engineering	Area Editor, Associate Editor
Daniele Linaro	IEEE CAS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Erivelton Nepomuceno	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Erivelton Nepomuceno	IEEE R9	IEEE Latin America Transactions	Associate Editor Deputy EiC
Erivelton Nepomuceno	IEEE	IEEE Potentials	Associate Editor
Alberto Oliveri	IEEE CAS	IEEE Transactions on Circuits and Systems I	Associate Editor
Fabio Pareschi	IEEE CAS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Francesco Sorrentino	IEEE CAS	IEEE Control Systems Letters (L-CSS)	Associate Editor
Yoko Uwate	IEEE CAS	IEEE CAS Society Newsletter	Associate Editor
Jiajing Wu	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor (until Dec 2021)
Yongxiang Xia	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor (until Dec 2021)
Yongxiang Xia	IEEE CAS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Mustak ErhanYalcin	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Wei Xing Zheng	IEEE CAS	IEEE Transactions on Circuits and Systems I	Associate Editor

### 3.3. Awards, Honors, and Recognition

(Fellow, Distinguished Lecturer, Outstanding Service, Best Paper Awards, and so on by the CAS Society)

Your Name	Awards / Honors / Recognition	Period
Peter Kennedy	CAS Society Distinguished Lecturer: 2022-2023	2022-2023
Xiang Li	Excellence Editor Award/ IEEE Transactions on Network Science and Engineering	2021
Alberto Oliveri	IEEE Transactions on Circuits and Systems I: Regular Papers: Certificate of Best Associate Editor	2020-2021
Ljiljana Trajkovic	CAS Society Distinguished Lecturer: 2021-2022	2021-2022

### 3.4. Keynote Speeches/Invited Talks:

Your Name	Invited by	Event/Conference Title	Talk Title	Date
Chi-Tsun (Ben), Cheng	University of Technology and Applied Sciences, Ibra, Oman	2021 Industrial Revolution Four (IR4-Era)	Featured talk: "The Digitalization Process in Australia's SMEs - Challenges and Solutions"	8 <sup>th</sup> June 2021
Manuel Dominguez-Pumar	Prof. Jose Manuel Quero-Reboul	CDE 2021	Mars 2020: the third NASA mission with Spanish wind sensing technology in Mars	11-06-2021
Francis C.M. Lau	Organizers	2021 International Conference on the Cooperation and Integration of Industry, Education, Research and Applications (Fuzhou), China	Peptide-Based Data Storage	12/2021
Ljiljana Trajkovic	Chair, CAS Chapter, Rakesh Kumar Palani <Rakesh.Kumar.Palani@ee.iitd.ac.in>	IEEE CAS Society Distinguished Lecture Program, Delhi, India	"Data mining and machine learning for analysis of network traffic"	April 5, 2022
Ljiljana Trajkovic	Organizers	14th International Conference on Computer and Automation Engineering, ICCAE 2022, Melbourne, Australia	"Machine learning for detecting power outage and ransomware using BGP routing records," (keynote talk)	March 26, 2022
Ljiljana Trajkovic	Organizers	The 5th International Conference on Big Data and Education, ICBDE 2022, London, United Kingdom	"Machine learning for detecting power outage and ransomware using BGP routing records," (keynote talk)	February 27, 2022
Ljiljana Trajkovic	Chair, IEEE SMC Student Branch Chapter	IEEE Systems, Man, and Cybernetics Society Student Branch Chapter, Sri Sairam Engineering College, Chennai, Tamil Nadu, India	"IEEE SMC Society," Inauguration of the IEEE SMC Society (invited talk)	February 10, 2022
Ljiljana Trajkovic	Organizers	5th International Workshop on Networking Women in Distributed Computing and Networks, NWDCN 2022, IIT Delhi, India	"Data Mining and Machine Learning for Analysis of Network Traffic" (invited talk)	January 4, 2022
Ljiljana Trajkovic	Chair, Graduate Program, Roberto Rosas Romero <roberto.rosas@udlap.mx>	Intelligent Systems, Universidad de las Américas Puebla	"Data Mining and Machine Learning for Analysis of Network Traffic" (invited seminar)	November 26, 2021
Ljiljana Trajkovic	Yingxu Wang <yingxu@ucalgary.ca>	20th IEEE International Conference on Cognitive Informatics and Cognitive Computing: Panel on	"Cognitive Informatics: Complexity Sciences, Data Mining, and Machine Learning" (panel)	October 30, 2021

		Future Development of IC*CC		
Ljiljana Trajkovic	Celia Shahnaz <celiashahnaz@gmail.com>	First IEEE PES Humanitarian Activity Committee Congress	"IEEE Smart Cities" (panel)	October 24, 2021
Ljiljana Trajkovic	Organizers	The 6th International Conference on Integrated Circuits, ICICM 2021, Nanjing, China	"Data Mining and Machine Learning for Analysis of Network Traffic" (keynote talk)	October 23, 2021
Ljiljana Trajkovic	Marcin Ziolk <m.ziolk@ieee.org>	IEEE Day in Poland 2021	"Data Mining and Machine Learning for Analysis of Network Traffic" (invited talk)	October 20, 2021
Ljiljana Trajkovic	Organizers	The First International Conference on Neuromorphic Computing, ICNC 2021, Wuhan, China	"Data Mining and Machine Learning for Analysis of Network Traffic" (keynote talk)	October 16, 2021
Ljiljana Trajkovic	Organizers	2021 5th International Conference on E-Business and Internet, ICEBI 2021, Singapore	"Data Mining and Machine Learning for Analysis of Network Traffic" (keynote talk)	October 16, 2021
Ljiljana Trajkovic	Organizers	19th IEEE International Symposium on Intelligent Systems and Informatics, SISY 202, Subotica, Serbia	"Data mining and machine learning for analysis of network traffic" (keynote talk)	September 16, 2021
Ljiljana Trajkovic	Celia Shahnaz <celia.shahnaz@ieee.org>	International Women in Engineering COVID-19 Congress 2021, WiECOV 2021, Bangladesh	"Technical society engagement and activities" (keynote talk)	August 22, 2021
Ljiljana Trajkovic	Organizers	10th International Conference on Informatics, Electronics & Vision (ICIEV) and 5th Int Conf on Imaging, Vision & Pattern Recognition	"Data mining and machine learning for analysis of network traffic," (keynote talk)	August 16, 2021
Ljiljana Trajkovic	Amit Jha <ajha@ieee.org>	IEEE CAS Society Distinguished Lecture Program, Santa Clara Valley	"Data mining and machine learning for analysis of network traffic"	June 17, 2021
Ljiljana Trajkovic	Daoyi Dong <d.dong@adfa.edu.au>	2021 SMC Society Cybernetics Summer School, Osaka, Japan	"Data mining and machine learning for detecting traffic anomalies and intrusions"	June 12, 2021
Ljiljana Trajkovic	Victor Raskin <vraskin@purdue.edu>	Annual Conference of the North American Fuzzy Information Processing Society	"Data mining and machine learning for detecting traffic anomalies and intrusions" (keynote talk)	June 8, 2021

### 3.5. Other distinguished IEEE services

(For example, CAS BoG, Region/chapter leadership, TC chair/secretary)

Your Name	Organization	Position/Activities	Period
Federico Bizzarri	Nonlinear Circuits and Systems Technical Committee	Chair Elect	June 2021 – May 2023
Erivelton Nepomuceno	Nonlinear Circuits and Systems Technical Committee	Secretary	June 2021 – May 2023
Hiroo Sekiya	IEEE CAS	BoG	Jan. 2020 – Dec. 2022
Gianluca Setti	Proceedings of the IEEE	Editor-In-Chief	2022
Marco Storace	Nonlinear Circuits and Systems Technical Committee	Chair	June 2021 – May 2023
Ljiljana Trajkovic	IEEE CAS Society Fellows Evaluation Committee	Member	2022
Ljiljana Trajkovic	IEEE Gustav Robert Kirchhoff Award Committee	Chair/Past Chair	2020-2021/2022
Ljiljana Trajkovic	IEEE Election Oversight Committee	Member/Vice-Chair	2021/2022
Ljiljana Trajkovic	IEEE Tellers Committee	Member/Vice-Chair	2021/2022
Ljiljana Trajkovic	IEEE Brain Technical Community Steering Committee	Member, SMC Society Representative	2021-2022
Ljiljana Trajkovic	IEEE Smart Village Governing Board	Member, SMC Society Representative	2020-2022
Ljiljana Trajkovic	IEEE Smart Cities Steering Committee	Member, SMC Society Representative	2020-2022
Ljiljana Trajkovic	IEEE Circuits and Systems Society joint Chapter of the Vancouver/Victoria Sections	Past Chair	2021-2022
Ljiljana Trajkovic	IEEE Control Systems Society, Robotics and Automation Society, and Systems, Man, and Cybernetics Society Chapter of the Vancouver Section	Vice-Chair	2011-2022
Ljiljana Trajkovic	IEEE Simon Fraser University Student Branch	Mentor	2008-2022
Yoko Uwate	IEEE CAS	BoG	Jan. 2021 – Dec. 2023
Yoko Uwate	IEEE CAS	Conference division	Jan. 2021 – Dec. 2023
Yoko Uwate	IEEE CAS	WiCAS chair	Jan. 2021 - present
Yoko Uwate	IEEE CAS	Shikoku chapter, secretary	Jan. 2019 - present
Mustak ErhanYalcin	IEEE CASS Turkey Chapter	Chair	2022-2024



## 4. TC Significant Technical Leadership and Innovations

Please list 5 (or less) most significant TC/SIG activities in the past year, for example, but not limited to

- (1) Established/organized new CASS journals/conferences/workshops
    - a. Please include title, scope, status (e.g., submissions, published papers)
  - (2) Organized special issues in CASS journal, special sessions/tutorials in CASS conferences, CASS seasonal schools, CASS industrial forums, or CASS competitions
    - a. Please include title, the guest editors/organizers, the year, and the month, the number of submissions, the number of papers published, and the impacts (e.g., the total number of citations/full text views so far or the total number of attendees)
  - (3) Organized new CASS initiatives
  - (4) Established cross-TCs/SIGs collaborations
  - (5) Awards received by the TC/SIG or the TC/SIG members
- Yongxiang Xia is Guest Editor for the Special Issue of IEEE TCAS-II on IEEE ISCAS 2022
  - Federico Bizzarri and Daniele Linaro were co-recipients of the “Second place” in the Competition on building energy consumption forecasting, 14-18 June 2021, sponsored by: Working group on Intelligent Data Mining and Analysis Intelligent Systems Subcommittee Analytic Methods for Power Systems Committee (IEEE Power and Energy Systems Society). The award was received by Daniele Linaro, Federico Bizzarri, Davide del Giudice, Samuele Grillo and Angelo Brambilla.

## 5. New plans for the next year

Are there any new initiatives, workshops, journal special issues, conference special sessions, etc., that your TC or TC members are planning for the next year?

### TC plans

#### a) Improvement of submissions of papers to the NCAS Track at ISCAS

In the last few years, we recorded a significant decrease in the number of submissions to our track. One of the main reasons has been identified in the change of subtopics, which some years ago was decided after a discussion involving all CASS TCs. We were asked to focus our track and subtopics on theory. This change does not correctly reflect the activities of our TC, which are focused not only on theoretical aspects but also on applications.

In the last three years, we have gone through many discussions and this year we have proposed many changes to the name of our track and list of subtopics, but without a significant improvement in the number of submissions.

The topic tree should be ideally coherent and non-redundant not just intra-TC but also inter-TC. Therefore, many actors are involved in the choice of ISCAS topics and subtopics. We plan to approve changes at one ISCAS meeting for the next ISCAS, possibly with some previous consultation with the ISCAS technical program co-chairs and the CAS technical activities and conference VPs; they have the broadest vision of what is going on cross-TC and can advise at best.

Of course, every change (and particularly every introduction of a new sub-topic) must be backed by a sufficiently large number of active TC members to guarantee the highest quality reviews, publicity, and the attraction of a sufficiently large number of submissions also from outside our established community.

#### b) Lectures from prominent scientists working in nearby areas

The research activity of the TC members, and thus of the TC itself, typically spread over several theoretical topics that have found application in many engineering realms of paramount relevance. To offer timely and significant research contributions, the TC community must remain informed of what happens around. Hence, a plan for the TC is to organize lectures from prominent scientists working in nearby areas. The goal is to guide the TC in identifying affine fields that may benefit from the TC expertise and, at the same time, new trends that are both appealing and strategic. It is easy to find examples in Artificial Intelligence, Sustainable Development, Green Economy, and Life Sciences.

To guarantee that this plan is significant and feasible, we will organize at least two and no more than four lectures per year, starting from 2022. All the TC members are invited to propose topics and lecturers. In case of multiple suggestions, we will adopt an e-vote procedure. Special attention will be given to the roster of the current IEEE distinguished lecturers.

### TC members' plans

- Izzet Cem Göknaar submitted to steering committee a proposal for holding ICECS 2023, the flagship conference of IEEE R8, in Istanbul as the prospective chairman.