

SAM TC Meeting @ ICASSP 2020

Christoph Mecklenbräuer

Monday, May 11, 2020

14:00 – 16:00 UTC

Virtual Meeting via WebEx

Agenda

- ❑ 1 Welcome
- ❑ 2 Report from Chair (Part 1)
 - Membership Structure
 - Awards
- ❑ 3 Conference and Workshop Reports
 - ICASSP 2020 (SAM TC Area)
 - CAMSAP 2019, Guadeloupe
(David Brie, Jean-Yves Tournet)
 - SAM 2020, Hangzhou goes virtual
(Zhiguo Shi, Martin Haardt)
 - CAMSAP 2021, Costa Rica ramp up
(Martin Haardt, André L.F. de Almeida, Rémy Boyer)
- ❑ 4 Proposals requested for
 - SAM 2022
 - CAMSAP 2023
- ❑ 5 SPS Activities
 - TWG Synthetic Aperture Channel
Sounding (Peter Vouras)
 - Data Science Initiative
 - Data Collections and Challenges
 - Unified EDICS
- ❑ 6 Report from Chair (Part 2)
 - TC status
 - Archiving initiative
- ❑ 7 Subcommittee Reports
- ❑ 8 Miscellaneous

2: SAM Membership 2020

New Members

- ❑ Rémy Boyer, University of Lille, France (R8, Ac, M)
- ❑ Yao Xie, Georgia Institute of Technology, Atlanta (GA), USA (R3, Ac, M)
- ❑ Hassan Mansour, Mitsubishi Electric Research Laboratories, Cambridge (MA), USA (R1, Ac, M)
- ❑ Henry Arguello, Universidad Industrial de Santander, Colombia (R9, Ac, M)
- ❑ Usman Khan, Tufts University, Medford (MA), USA (R1, Ac, M)
- ❑ Bin Liao, Shenzhen University, Shenzhen, China (R10, Ac, M)



Retiring Members (Dec 2019)

- ❑ Monica Bugallo (R1, Ac, F)
- ❑ Yonina Eldar (R8, Ac, F)
- ❑ Braham Himed (R2, In, M)
- ❑ Jian Li (R3, Ac, F)
- ❑ Chong Meng Samson See (R10, In, M)
- ❑ Milica Stojanovic (R1, Ac, F)
- ❑ Martin Haardt (Past Chair) (R8, Ac, M)

Returning / Re-Elected

- ❑ Vincenzo Matta, 2nd term
- ❑ Antonio Napolitano, 2nd term
- ❑ Pascal Chevalier, 2nd term
- ❑ Kerain Abed-Merain, 2nd term
- ❑ Yongwei Huang, 2nd term
- ❑ Lei Huang, 2nd term

Statistics

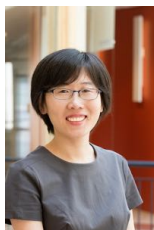
- ❑ 13 R1-6, 1 R7, 16 R8, 2 R9, 7 R10
- ❑ 6 Industry/Lab, 34 Academic
- ❑ 8 female, 32 male



2: SAM Membership 2019

New Members

- ❑ Elias Aboutanios
(Univ. New South Wales, Australia)
- ❑ Adel Belouchrani
(Ecole National Polytechnique, Algeria)
- ❑ Yuejie Chi
(Carnegie Mellon University, USA)
- ❑ Walter Kellermann
(Friedrich Alexander University, Germany)
- ❑ Xiao-Ping (Steven) Zhang
(Ryerson University, Canada)



Retiring Members (Dec 2018)

- ❑ Chong Yung Chi
- ❑ Xavier Mestre
- ❑ Phil Schniter
- ❑ Ami Wiesel
- ❑ Kainam Thomas Wong

Returning / Re-Elected

- ❑ Maria Sabrina Greco
- ❑ Fauzia Ahmad
- ❑ Waheed U. Bajwa
- ❑ André L.F. de Almeida
- ❑ Qian He
- ❑ Hongbin Li
- ❑ Gonzalo Mateos Buckstein
- ❑ Piya Pal
- ❑ Ashish Pandharipande

Statistics

- ❑ 14 R1-6, 1 R7, 17 R8, 1 R9, 7 R10
- ❑ 8 Industry/Lab, 34 Academic
- ❑ 10 female, 32 male



2: SAM Membership Structure 2021

New SPS rules demand changes in the TC membership structure

Specifically:

- the number of associate TC members is bounded by $\frac{1}{2}$ of the number of (regular) TC members
- The terms of the associate TC members are tied to the term of the TC chair

This will become effective January 2021

2: 2019 SAM Awards at ICASSP 2020 (1/2)

Norbert Wiener Society Award awarded to **Georgios Giannakis**
*for fundamental contributions to statistical signal processing,
especially for networking and communications,
and for outstanding mentoring of young researchers.*

Carl Friedrich Gauss Education Award awarded to **Peter Stoica**
*for sustained contributions to education in the area of
image and video processing and understanding*

Sustained Impact Paper Award awarded to **Hamid Krim** and **Mats Viberg**
*Two Decades of Array Signal Processing Research: The Parametric Approach,
IEEE Signal Processing Magazine, Vol. 13, No. 4, July 1996*

2: 2019 SAM Awards at ICASSP 2020 (2/2)

Signal Processing Magazine Best Column Award awarded to
Emil Björnson, Mats Bengtsson, and Björn Ottersten

Optimal Multiuser Transmit Beamforming: A Difficult Problem with a Simple Solution Structure,

IEEE Signal Processing Magazine, Vol. 31, No. 4, July 2014

IEEE SPS Young Author Best Paper Award awarded to
Mianzhi Wang and Arye Nehorai

Coarrays, MUSIC, and the Cramer–Rao Bound

IEEE Transactions on Signal Processing, Vol. 65, No. 4, February 2017



2: 2020 Distinguished Lecturers of the IEEE SPS and their Topics

2020 Distinguished Lecturers

Andrea Cavallaro

Gaurav Sharma

Ami Wiesel

Xiao-Ping (Steven) Zhang

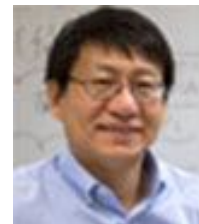
Qing Zhao

<https://signalprocessingsociety.org/professional-development/distinguished-lecturers>

2: 2020 Distinguished Lecturers of the IEEE SPS and their Topics

□ Ami Wiesel (nominated by SAM TC)

- ⇒ Binary optimizations in signal processing
- ⇒ Multitask regressions and flood forecasting
- ⇒ Structured and robust covariance estimation



⇒ Xiao-Ping (Steven) Zhang

- ⇒ Signal processing, AI and big data for finance, economics, and business
- ⇒ Passive localization and tracking for internet of things
- ⇒ Graphical probabilistic modeling, machine learning and signal processing on graph with applications in multimedia

3: Conference Report

ICASSP is growing:

Virtual ICASSP 2020 Barcelona versus last year:

With 3951 (3510) submissions, 1881 (1725) accepted papers, at an acceptance rate of 47.6% (49.1%), and 67 (41) presentations of journal articles recently published in Society's Transactions and Letters, this is again the biggest ICASSP in the history of this conference series.

This task requires the whole IEEE SPS to be mobilised, and indeed 97.5% (97%) of submitted papers received three or more reviews, a whopping total of 13557 (10500) reviews submitted.

2625 reviewers (Note: $13557/2625 = 5$ avg)

SAM Area: 189 submission x 4 reviews = 756 requested

3: SAM TC Workshop Reports

□ CAMSAP 2019

⇒ Guadeloupe, French West Indies (David Brie, Jean-Yves Tournieret)

□ SAM 2020

⇒ Hangzhou, China (Zhiguo Shi)

□ CAMSAP 2021

⇒ Costa Rica (Martin Haardt, André L.F. de Almeida, Rémy Boyer et al.)



CAMSAP 2019

GUADELOUPE, FRENCH WEST INDIES

DECEMBER 15-18, 2019



Organizing Committee



- General Co-Chairs

David Brie, University of Lorraine, France

Jean-Yves Tournet, University of Toulouse, France



- Technical Co-Chairs

Geert Leus, TU Delft, Netherlands

Antonio Marques, King Juan Carlos University, Spain



- Local Chairs

Cédric Richard, Nice Sophia-Antipolis University, France

Guillaume Ginolhac, University of Savoie, France



- Special Sessions

Romain Couillet, Centrale Supélec, France

Yoann Altmann, Heriot-Watt University, UK



CAMSAP 2019

Organizing Committee



- Finance Chairs

Mónica F. Bugallo, Stony Brook University, USA

Jordi Vilà-Valls, CTTC, Spain



- Publications

Nicolas Gillis, University of Mons, Belgium

Yannick Berthoumieu, University of Bordeaux, France



- Student Chair

Fauzia Ahmad, Temple University, USA



CAMSAP 2019

Technical program in a glance

- Journey that started 1.5 years ago!
- 5 invited speakers
 - A. Swami, M. Elad, R. Vidal, P. Abry, K. Ma
 - Nice and diverse collection of topics
 - Right after, SS associated with the plenary talk
- 2 tutorials
 - E. Bjornson & L. Sanguinetti, G. Mateos & S. Segarra
 - Comms vs. Data-science oriented
- 27 oral and poster sessions: 18 invited and 9 regular
- 1 student paper contest: 8 finalists and 3 awards



CAMSAP 2019

Paper stats and budget

- Papers - Registrations
 - 165 submissions (72 regular, 93 invited)
 - 3.75 reviews per paper, all of them at least 3
 - Good quality: 65% received a score of 3.0/4.0 or more, 70% acceptance rate
 - 186 registrations
- Budget
 - Total Receipts (pre-loan): 136.820,00
 - Total Expenses (pre-loan): 112.788,70
 - Surplus/Loss: 24.031,30
 - Surplus Percentage: **21%**

CAMSAP 2019

IEEE SAM 2020

Hangzhou, China

(Fully Virtual Conference)

June 8–11, 2020



Organizing Committee

General Co-Chairs



— Martin Haardt
(TU Ilmenau, Germany)



Zhiguo Shi —
(Zhejiang U, China)

Technical Co-Chairs



— André L. F. De Almeida
(Federal U Ceará, Brazil)



Qian He —
(UESTC, China)

Special Session Chairs



— Lei Huang
(Shenzhen U, China)



Yujie Gu —
(Temple U, USA)

Publicity Chair



Antonio De Maio
— (University of Naples
Federico II, Italy)

Finance Chair



Xiaopeng Yang
(BIT, China) —

Publication Chair



— Bo Chen
(Xidian Univ., China)

Junfeng Wu
Chengwei Zhou
(Zhejiang Univ., China) —

Local Chair

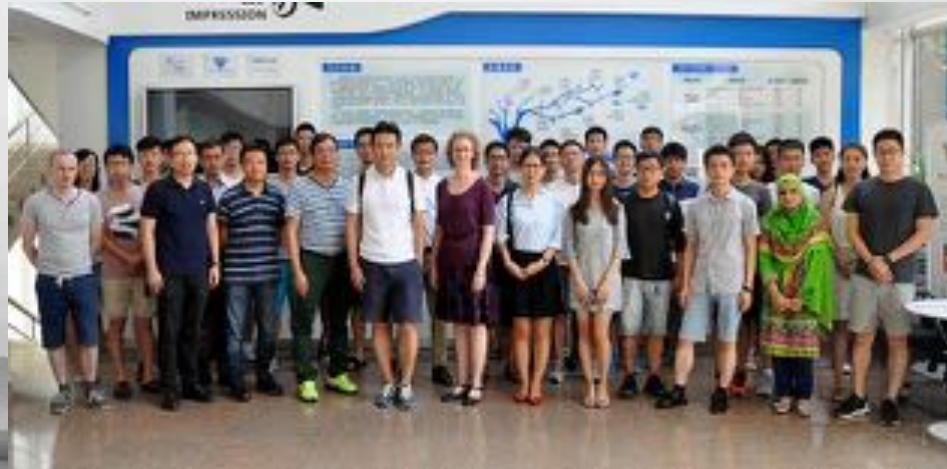


SAM 2020

Zhejiang University (Host)



- Top tier university in China
- 23,302 undergraduates
- 22,376 postgraduates
- 8,222 faculty and staff members



Our research group can provide enough volunteers.

SAM 2020

Virtual Conference Platform

- Software: Zoom
 - Popular online meeting solution during COVID-19 pandemic
- Service Provider: Conference Catalysts, LLC
 - World-class conference, operations, and web management solutions
 - Support for SPAWC, ICME of the IEEE SPS



SAM 2020



Tutorial Speaker



Zhi-Quan (Tom) Luo

Department of Electrical and Computer Engineering
University of Minnesota, Twin Cities

SAM 2020

Tutorial Speaker



Marius Pesavento

Technische Universität Darmstadt
Germany



Minh Trinh Hoang

Blekinge Institute of Technology
Sweden



Mats Viberg

SAM 2020

Keynote Speakers



Ami Wiesel

The Hebrew University of Jerusalem



Anna Scaglione

University of Arizona



A. Lee Swindlehurst

University of California, Irvine



Georgios Giannakis

University of Minnesota



Lieven De Lathauwer

KU Leuven



Wen Tong

Huawei Technologies Co., Ltd.

SAM 2020

Special Sessions

No.	Organizers	Title
1	Xiaohuan Wu, Hua Chen & Qing Wang	Robust Super-Resolution DOA Estimation and Its Applications
2	Jun Fang & Hongbin Li	Sparse and Low-Rank Signal Processing for Millimeter Wave Communications
3	Yulong Huang & Liang Zhang	Multi-Sensor Data Fusion for Underwater Application
4	Guolong Cui, Bin Bao & Yong Jia	Cognitive Waveform Diversity Design and Signal Processing
5	Cheng Qian, Xiao Fu & Kejun Huang	Structured Tensor and Matrix Methods for Sensing, Communications, and Machine Learning
6	Jingwei Xu, Hing Cheung So & Wen-Qin Wang	Waveform Diverse Array Radar
7	Jun Liu & Danilo Orlando	Advanced Techniques in Radar Detection, Localization, and Electronic Counter-Measures
8	Yongming Huang, Himel Suraweera & Alessio Zappone	Intelligent Antenna Arrays and Surfaces for Future Communications
9	Wei Liu & Yimin D. Zhang	Aperture Extension and Synthetic Techniques for High-Resolution Detection and Estimation
10	Pu (Perry) Wang & Ting Yuan	Automotive Radar Sensing
11	Lei Cheng & Yik-Chung Wu	Structured Matrix/Tensor Decompositions: Models, Applications and Fast Algorithms
12	Elias Aboutanos & Xiangrong Wang	Recent Advances in Beamforming Techniques and Applications
13	Chong-Yung Chi & Chia-Hsiang Lin	Unsupervised Computing and Large-Scale Optimization for Multi-dimensional Data Processing
14	Karim Abed-Meraim & Adel Belouchrani	Dependent Source Separation
15	Xianpeng Wang, Lianglian Wan & Fangqin Wen	Array Signal Processing with Imperfect Scenarios
16	Xiaofei Zhang & Junpeng Shi	Sparse Array Configuration for Improved Spectrum Estimation and Its Applications
17	Xue Jiang & Zhongfu Ye	Robust Beamforming Based on Convex/Nonconvex Optimization
18	Lei Huang & Mohamed Rihan	Integrated Radar-Communication Systems and Networks: Advancements, Challenges, and Opportunities
19	Gang Li & Xiaolan Qiu	Advanced Methods of Synthetic Aperture Radar Imaging

SAM 2020

SAM TC Meeting @ ICASSP 2020

Statistics

Number of submitted papers	257 (highest submissions in SAM history)
Number of accepted papers	167
Expected number of authors	74
Average number of attendees for past 5 years	165

** Expected number of authors means the expected number of authors who would pay the author registration rate subject to that each registration can cover up to four papers. This is a much lower number than the previous average number of attendees, i.e. 165. This leads to the high registration fee.

SAM 2020

Program – Tutorials

June 8, 2020	Tutorial 1
Asia/Shanghai 4:30 - 7:30 PM	Optimization Techniques for Beamforming (<i>Tom Luo</i>)
CET 10:30 – 1:30 PM	
EST 4:30 – 7:30 AM	
June 8, 2020	Tutorial 2
Asia/Shanghai 8:00 - 11:00 PM	Four Decades of Array Signal Processing Research: An Optimization Relaxation Rechnique Perspective (Marius Pesavento, Minh Trinh Hoang, Mats Viberg)
CET 2:00 – 5:00 PM	
EST 8:00 – 11:00 AM	

Live + Q&A session

SAM 2020

Approved Budget Overview

Promotion/Advertisement	\$702.50
Professional Service	\$11521.00
Conference Service	\$13769.00
Speaker Expenses & Honorariums	\$4496.00
Grants & Conference Awards	\$1405.00
Administrative Fee	\$637.87
Contingency	\$1594.68
Total	\$34126.05

SAM 2020

Budget Details

Category	Item	Amount (USD)
Promotion	Advertisements	702.50
Conference Service	Internet&Telephone	702.50
	Volunteer	2810.00
	Virtual Platform	10256.50
Professional Service	Registration Services	8430.00
	Paper Management Services	2810.00
	Accepted Paper Service	281.00
Grants & Awards	Grants Awarded	1405.00
Speaker Expenses	Keynote/Tutorial Speaker Fee	4496.00

SAM 2020

Registration Rate

Rates for Membership Level	Author Rate		Non-Author Rate	
	USD	RMB	USD	RMB
SPS Member	\$435.55	¥3085	\$0	¥0
IEEE Member	\$505.80	¥3583	\$0	¥0
Non-Member	\$590.10	¥4180	\$0	¥0
SPS Student Member	N/A	N/A	\$0	¥0
IEEE Student Member	N/A	N/A	\$0	¥0
Student Non-Member	N/A	N/A	\$0	¥0
IEEE Life Member	N/A	N/A	\$0	¥0

- Each registration includes admission to the technical sessions, exhibits, and one copy of the electronic proceedings
- Each author registration can cover up to **Four** papers

SAM 2020



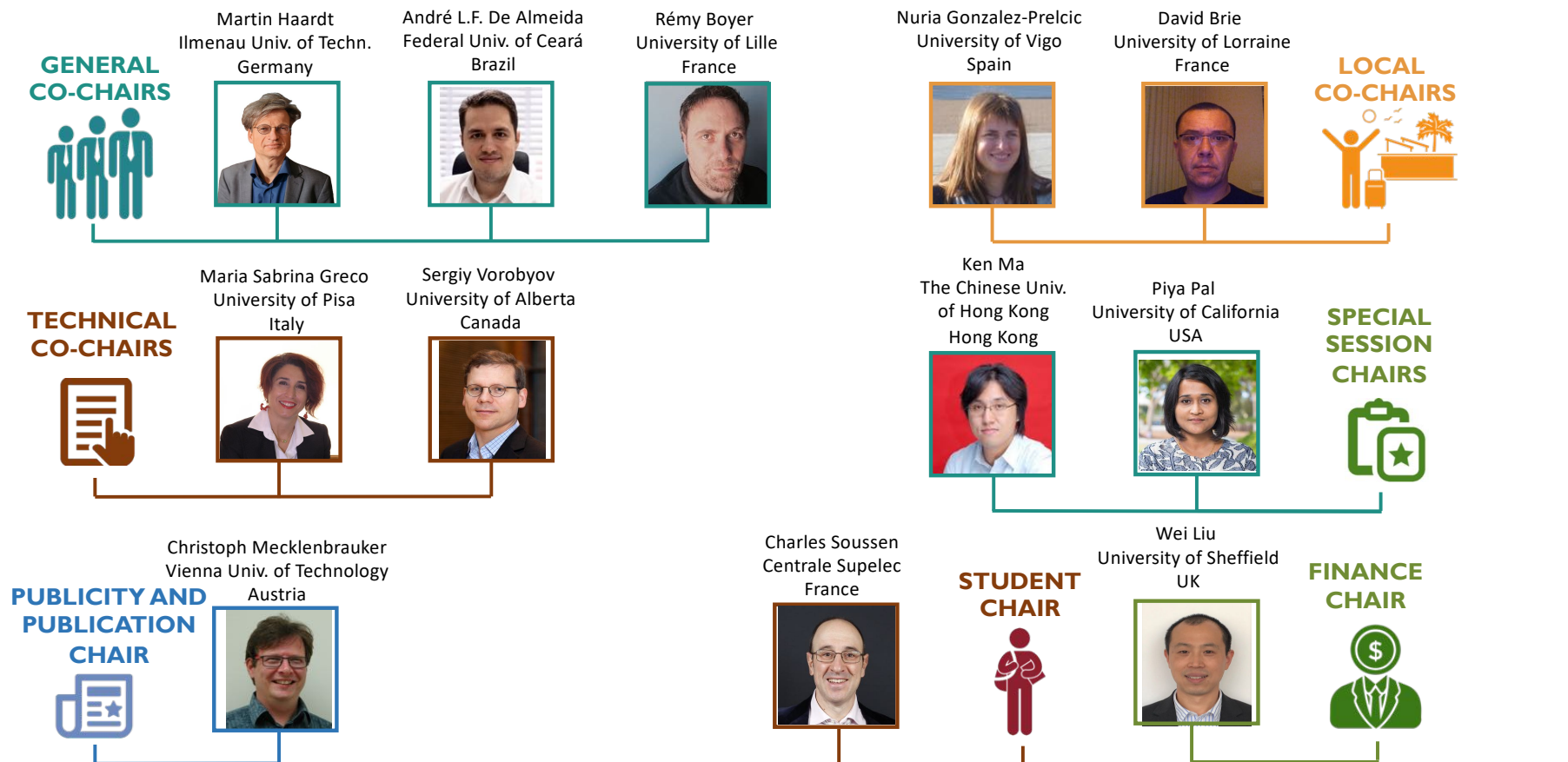
CAMSAP 2021

**9th IEEE International Workshop on Computational Advances
in Multi-Sensor Adaptive Processing**

Costa-Rica, December 12-15, 2021



Organizing committee



CAMSAP 2021

Location: *Costa Rica*



Capital: San José

Official language: Spanish

51000 sq. km for a population of 5 millions

Time zone : UTC - 6 h

1 \$ = 561 CRC (Costa Rican Colon)

Costa Rica is the **most industrialized** country in Central America

Costa Rica is a **largely safe** country, but petty crime can occur



CAMSAP 2021



The climate is tropical year round



SJO is the primary airport serving San José, the capital of Costa Rica (around 5 million of passengers)



3 all-inclusive resorts are considered (**Dreams Las Mareas**, **Westin Golf Resort and Spa**, **Riu Guanacaste**)



CAMSAP 2021

Suggested schedule

December 2020 :	First announcement and call for papers
March 2021 :	Special session proposals
July 2021 :	Full paper submission
September 2021 :	Notification of acceptance
October 2021 :	Camera-ready paper and tentative program
November 2021 :	Early registration due date

CAMSAP 2021

4: SAM TC Workshop Proposals

□ SAM 2022

⇒ Preparation of proposals is encouraged

⇒ CAMSAP 2023

⇒ Preparation of proposals is encouraged

5: SPS Activities

□ SPS Data Science Initiative

⇒ André de Almeida, Wei Liu

□ Data Collections and Challenges

⇒ Christoph Mecklenbräuer, TBD

□ Unification of EDICS within the SPS

⇒ Christoph Mecklenbräuer

5: Unified EDICS

Overall goal is alignment of EDICS for all IEEE SPS publications and conferences.

IEEE SPS Publications Board started this 2018.

Request by Tulay Adali in April 2019 to SAM TC to review and comment

<https://signalprocessingsociety.org/publications-resources/unified-edics>



5: Unified EDICS

SAM-APPL	Applications of sensor & array multichannel processing
SAM-BEAM	Beamforming
SAM-CALB	Array calibration
SAM-CSSM	Compressed sensing and sparse modeling
SAM-DOAE	Direction of arrival estimation
SAM-GSSP	Geophysical and seismic signal processing
SAM-IMGA	Inverse methods and imaging with array data
SAM-LRNM	Learning models and methods for multi-sensor systems
SAM-MCHI	Multichannel processing, identification, and modelling
SAM-MAPR	Microphone array processing
SAM-NWAV	Non-wave based array processing
SAM-PERF	Performance analysis and bounds
SAM-SDET	Source detection and separation
SAM-SENS	Multi-sensor remote sensing
SAM-STAP	Space-time adaptive methods
SAM-TNSR	Tensor-based signal processing for multi-sensor systems
SAM-MUCN	Multi-user and cooperative networks
SAM-CAMS	Computational advances for multi-sensor systems

5: Unified EDICS

RAS-DTCL	Target detection, classification, localization
RAS-LCLZ	Source localization
RAS-MIMO	MIMO Radar and waveform design
RAS-SARI	Synthetic aperture radar/sonar and imaging
RAS-SONR	Sonar and underwater signal processing
RAS-TRCK	Target tracking
BIO-SENS	Sensor arrays for medical signal and image processing
SPC-MIMO	Multiple-input multiple-output communication systems
SPC-MMIMO	Massive MIMO communication systems

5: Unified EDICS – Update Procedure

Procedure for continuous updating the unified EDICS is established:

- Either an EiC or a TC Chair can initiate request for a change in EDICS: modification, addition or deletion
- Requested changes should reflect the ongoing changes in the field. It is desirable to have the proposals supported by data.
- If this is an EiC contacts the VP-Pub and **if a TC Chair, contacts VP-TD** and the VP makes the connection with the corresponding (most relevant) EiC or TC Chair accordingly working with the corresponding VP. Here, multiple EiCs or TC chairs might be involved if needed.
- **Once the EiC(s) and TC Chair(s) reach a decision, they send their suggested change to the VP-Pub and VP-TD** who together bring the requested change to ExCom for approval.

5: Unified EDICS for 2020 and beyond

■ Unified EDICS List

<https://signalprocessingsociety.org/publications-resources/unified-edics>

SPS Technical Working Groups

(approved by the SPS BoG in Oct 2019)

- Technical Subgroups redefined as Technical Working Groups (TWG).
- TWG resides under a primary TC
- TWG covers a specific topic within SPS Field of Interest.
- Breadth of activities much larger than that of a Technical Subgroup as defined previously.

TWG Synthetic Aperture Channel Sounding

Final approval by IEEE SPS on 15 April 2020
TWG resides under SAM TC

TWG Chair: Peter Vouras (NIST)



TWG Synthetic Aperture Channel Sounding

Background Information

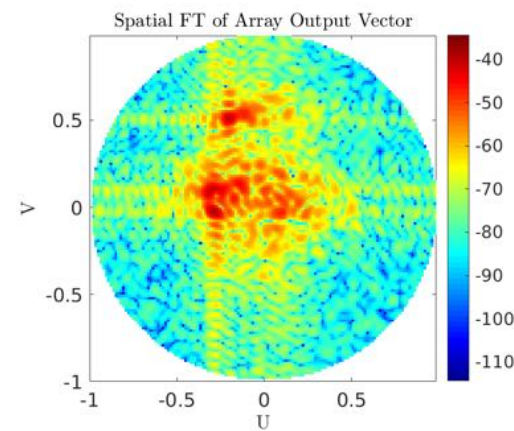
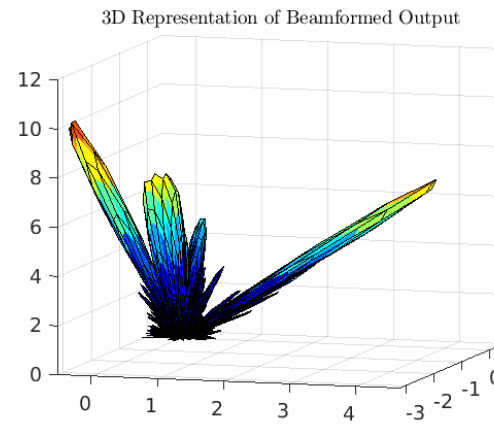
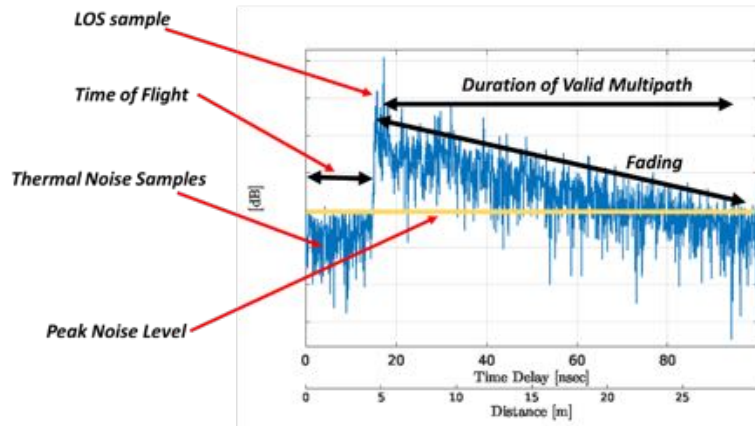
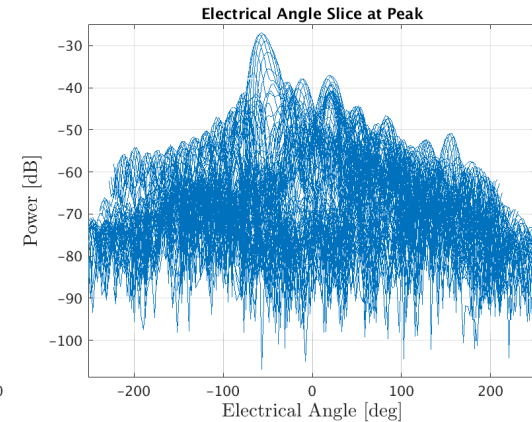
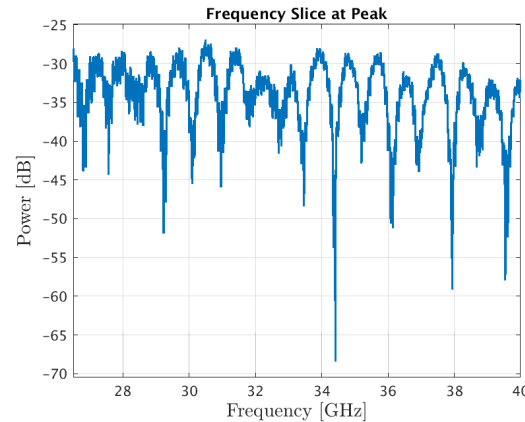
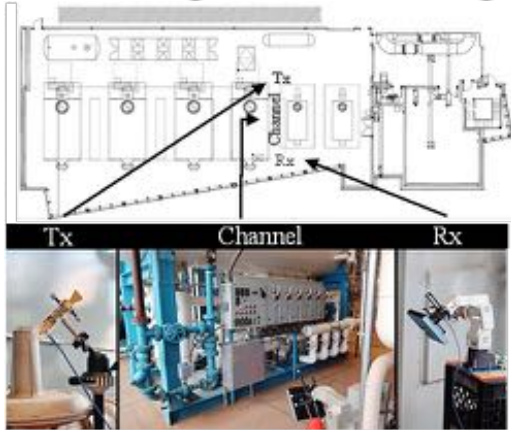
- Synthetic Aperture Technical Working Group (TWG) received final approval on April 15, 2020
- First virtual meeting scheduled for May 19
- Roster includes representatives from:
 - Rensselaer Polytechnic Institute
 - University of Rochester
 - University of Melbourne
 - Air Force Research Laboratory
 - Temple University
 - University of Pisa
 - National Institute of Standards and Technology

Scope

- The purpose of this TWG is to unify the theoretical framework for synthetic aperture estimation techniques across a wide range of frequencies and propagation media
- Synthetic aperture applications of interest include:
 - Wireless channel sounding
 - Synthetic aperture radar
 - Sonar
 - Medical Ultrasound
 - Seismic Imaging
 - Phased array and wireless device testbeds
- Relevant technical challenges include:
 - Robust hardware designs
 - Wideband implementations
 - Joint delay-angle estimation
 - Super-resolution techniques
 - Impact of position errors and measurement uncertainties
 - Real-time processing

TWG Synthetic Aperture Channel Sounding

Sample Output: NIST Synthetic Aperture



Dense Multipath Environment in Central Utility Plant Boulder Campus

Initiatives

❑ Archiving of SAM Workshop Websites

- ⇒ Responsible: Waheed U. Bajwa
- ⇒ Past workshops are often housed on University servers, and eventually are removed.
- ⇒ Lost TC memory (and memories).
- ⇒ IEEE is willing to house them, link from web page.
- ⇒ Presently the following workshops have been archived:
 - SAM 2018
 - CAMSAP 2017
 - SAM 2016
 - CAMSAP 2015
 - SAM 2014
 - CAMSAP 2013
 - CAMSAP 2011
 - SAM 2010
 - CAMSAP 2009
 - CAMSAP 2007
 - CAMSAP 2005
 - SAM 2002
- ⇒ **To Do: CAMSAP 2019,**
- ⇒ **Missing: SAM 2012, SAM 2008, SAM 2006, SAM 2004.**

6: History of ICASSP SAM Area Submissions

- Annual figures for SAM submissions as a fraction of total ICASSP submissions:
 - ⇒ **2020: 189 / 3951 = 4.8 %** **Barcelona, Spain**
 - ⇒ 2019: 140 / 3510 = 4.0 % Brighton, UK
 - ⇒ 2018: 147 / 2738 = 5.4 % Calgary, Canada
 - ⇒ 2017: 170 / 2697 = 6.3 % New Orleans, USA
 - ⇒ 2016: 200 / 2682 = 7.5 % Shanghai, China
 - ⇒ 2015: 212 / 2322 = 9.1 % Brisbane, Australia
 - ⇒ 2014: 222 / 3544 = 6.3 % Florence, Italy
 - ⇒ 2013: 216 / 3362 = 6.4 % Vancouver, Canada
 - ⇒ 2012: 171 / 2615 = 6.5 % Kyoto, Japan

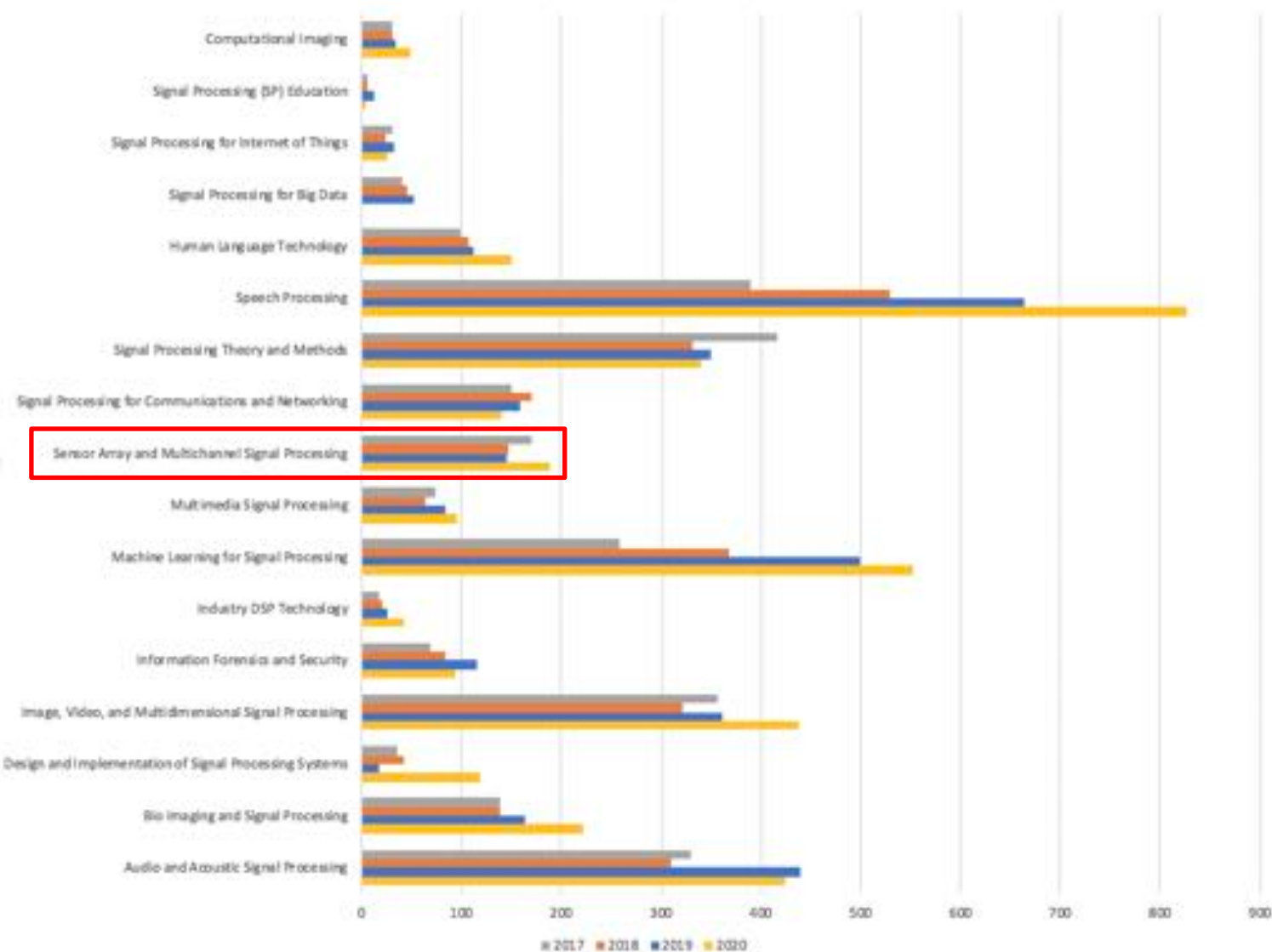
It seems that the number of SAM submissions is increasing again after five years of decline.

Some key issues in this matter are:

Unified EDICS

Role of Special Sessions

6: ICASSP Submissions 2017-2020



6: ICASSP 2020 SAM Area

- 189 papers submitted (of which 2 were transferred in from other tracks before the review)
- 86 accepted regular submissions. This means a 45,5 % acceptance rate.
- Additionally there are 5 Signal Processing Letters presented in SAM sessions.
- Four 6-paper lecture sessions, six poster sessions with up to 12 papers each.

- L1 – Direction of Arrival Estimation
- L2 – MIMO Systems and MIMO Radar
- L3 – Sparse Arrays and Sparse Sensing
- L4 – Learning models and methods for multi-sensor systems
- P1 - Radar and Acoustic Array Processing
- P2 – Beamforming, Relaying, and Source Separation
- P3 – Localization and Tracking
- P4 – Detection, Estimation and Classification
- P5 – Sparsity, Super-Resolution, and Imaging
- P6 – Robustness, Decompositions, Calibration, and Bounds

7: Subcommittee 2020 Reports

- ❑ **Technical Directions** (Maria Sabrina Greco, Gonzalo Seco-Granados, Birsen Yazici)
- ❑ **Awards** (Antonio Napolitano, Jarvis Haupt, Lei Huang, Walter Kellermann)
- ❑ **Nominations and Elections** (Fulvio Gini, Yimin Daniel Zhang, Vincenzo Matta, Xiao-Ping (Steven) Zhang)
- ❑ **Workshops** (André L. F. de Almeida, Wei Liu, Frederic Pascal)
- ❑ **Webmaster** (Waheed U. Bajwa, Alexander Bertrand)
- ❑ **Newsletter** (Hongbin Li, Yao Xie, Nuria González Prelcic)
- ❑ **Membership** (Piya Pal, Yongwei Huang)
- ❑ **Industry/Government** (Braham Himed, Chong Meng Samson-See, Pascal Chevalier)
- ❑ **Education** (Adel Belouchrani, Henry Arguello)
- ❑ **EDICS** (Christoph Mecklenbräuker, Wei Liu, Usman Khan)
- ❑ **Student** (Herbert Groll, Christoph Mecklenbräuker)

(underline means chair)

7: Subcommittee 2020 Reports

Area Chairs

- ❑ Applications of SAM processing
- ❑ Beamforming and space-time processing
- ❑ Detection, estimation, and source separation
- ❑ Multi-antenna and multi-channel comm.
- ❑ Radar array processing
- ❑ Sensor array processing
- ❑ Sensor networks

Brian Sadler
Gonzalo Seco-Granados
Karim Abed-Meraim
Eduard Jorswieck
Fauzia Ahmad
Rémy Boyer
Ashish Pandharipande

Four Regional Representatives

- ❑ 1. USA (1-6)
- ❑ 2. Canada/Latin America (7/9)
- ❑ 3. Europe/Mid East/Africa (8)
- ❑ 4. Asia/Pacific (10)

Gonzalo Mateos Buckstein
Xiao-Ping (Steven) Zhang
Frederic Pascal
Qian He



8: Discussion topics

■ SP Cup 2020

Unsupervised abnormality detection by using intelligent and heterogeneous autonomous systems

<https://2020.ieeeicassp.org/authors/sp-cup-2020/>

□ SP Cup proposal for 2021

- ⇒ For undergraduate students
- ⇒ Should be organized by the Student Subcommittee
- ⇒ All TC members can provide input (yes! indeed!)
- ⇒ A playful story seems to be important for acceptance
- ⇒ New suggestion?
 - Tbd
 - Proposal deadline in September 2020

Task List 2020-2021 (1/3)

■ **May 31, 2020:**

Nominations for Distinguished Lecturers
(Responsibility: TC chair, Awards subcommittee)

■ **June 15, 2020:**

Newsletter issue with report from ICASSP 2020 and SAM 2020, awards, first announcement of CAMSAP 2021
(Responsibility: Newsletter Subcommittee)

• **June 30, 2019:**

Review the current list of associate and affiliate members
(Responsibility: Membership Subcommittee)

■ **September 1, 2019:**

Nominations for Paper Awards: BPA, YABPA, MBPA, LBPA, OPA, SIPA (Responsibility: TC Vice-Chair, Awards subcommittee)

Nominations for Society Award, Technical Achievement Award
(Responsibility: TC Chair, Awards subcommittee)



Task List 2020-2021 (2/3)

September 2020:

Proposal submission for SP Cup 2021

Proposals for SAM 2022 to be submitted to SAM TC Chairs

November 15, 2020:

Membership election completed (Responsibility: Elections and nominations subcommittee)

November – December 2020:

ICASSP 2021 Paper Reviews and Decisions (Responsibility: TC-chair)

Paper acceptance communicated to authors January xx, 2021

Task List 2020-2021 (3/3)

- **January 15, 2021:**

- Five-Minute Video Clip Contest (5-MICC)**

- **January 31, 2021:**

- Update of IEEE SAM TC Website: Membership 2021**

- Assignment of new members to subcommittees**

- Make sure that mailing lists reflect updated membership**

- **March 2021:**

- SP Cup Submission Deadline March xx, 2021**

- Unsupervised abnormality detection by using intelligent and heterogeneous autonomous systems*

- <https://2020.ieeeicassp.org/authors/sp-cup-2020/>

- **January - April 2021:**

- Preparation of proposals for SAM 2022 and CAMSAP 2023 submission to chairs**

CUAGN

at **virtual** IEEE SAM Workshop 2020 in Hangzhou
and

at next IEEE ICASSP 2021 in Toronto
with the next SAM TC meeting

