



75TH
Anniversary



Program

Welcome to 2024 IEEE CAMA

Da Nang, Vietnam

The IEEE International Conference on Antenna Measurements and Applications (IEEE CAMA) is an international conference technically and financially sponsored by the IEEE Antennas and Propagation Society (IEEE AP-S) and co-technically sponsored by Antenna Measurement Techniques Association (AMTA) to provide an interdisciplinary forum for sharing experience and discussions about state-of-the-art in the development of antennas and antenna array systems with measurements in controlled and non-controlled (in-situ) environments, electromagnetic measurement techniques, scattering and diffraction measurements, near-field and far-field measurements, new antenna testbeds, radar and RCS measurements, simulations and prediction of measurements in realistic configurations, etc. for various applications such as, electromagnetic metrology and precision measurements, terrestrial and space-based communications including wireless communications, 5G/6G/Next-G networks, IoT, UAVs, UAS and drones, microwave, millimeter-wave, sub-millimeter and THz systems, inverse scattering and imaging methods and techniques, computational methods for antenna design, industrial, medical and e-health applications.



This tenth edition 2024 IEEE CAMA is taking place at the Pullman Hotel, in Da Nang, Vietnam.

The CAMA format is a two and half day conference: Wednesday through Friday morning. Friday afternoon is dedicated to a social event for all attendees: visit to Marble Mountain and Hoi An Ancient Town.

The technical program includes regular, special sessions and lectures by two distinguished keynote speakers:

- "Innovative Antenna Designs for Next-Generation CubeSats: Conceptualization to Mission Realization" by Prof. Yahya Rahmat-Samii (University of California, Los Angeles, USA).
- "Near-Field MetaSteering - A Method for Complete Steering of the Beam of Any Fixed-Beam Antenna" by Prof. Karu Esselle (University of Technology Sydney, Australia).

We are pleased to welcome you at the Pullman Resort Hotel Da Nang, beautifully located on the sands of Da Nang beach. We certainly hope you enjoy your stay and return to your daily work renewed, after networking with people who share your technical interests, and refreshed with new ideas for your future work on Antenna Measurements and Applications.

Christian Pichot
General Chair

Steering Committee

• General Chairs

Christian Pichot (Université Côte d'Azur, CNRS, France).

Nguyen Ngoc Vu (University of Da Nang, Vietnam).

Binh Duong Nguyen (Ho-Chi-Minh International University, Vietnam National University Ho-Chi-Minh, Vietnam).

• Technical Program Chairs

Fabien Ferrero (Université Côte d'Azur, CNRS, France).

Claire Migliaccio (Université Côte d'Azur, CNRS, France).

Minh Thuy Le (Hanoi University of Science and Technology, Vietnam) .

Le-Huy Trinh (University of Information Technology, Vietnam National University Ho Chi Minh, Vietnam)

Trung-Kien Pham (Ho Chi Minh City International University, Vietnam National University Ho Chi Minh, Vietnam).

• Local Organization Chairs

Nhan Le Than (Danang International Institute of Technology, Vietnam).

Doan Thi Ngoc Canh (University of Economics, University of Danang, Vietnam)

Françoise Trucas (Université Côte d'Azur, CNRS, France)

• Special Session Chairs

Naruto Yonemoto (ENRI, National Institute of Maritime, Port and Aviation Technology, Japan).

Nan Yang (Sun Yat-Sen University, Guangzhou, China).

• Financial Chair

Le-Huy Trinh (University of Information Technology, Vietnam National University Ho Chi Minh, Vietnam).

• Webmaster

Christian Pichot (Université Côte d'Azur, CNRS, France).

• Advisory Committee

Andrea Randazzo (University of Genoa, Italy)

Alessandro Fedeli (University of Genoa, Italy)

Reviewers

Michikata Ameya, National Institute of Advanced Industrial Science and Technology, Japan

Mirko Barbuto, Niccolo Cusani University, Italy

Noori BniLam, European Space Agency (ESA)

Francesco Alessio Di Candia, CNRS, Italy

Sandra Costanzo, University of Calabria, Italy

Aurelian Crunteanu, Xlim, CNRS, Université de Limoges, France

Cyril Decroze, Xlim, CNRS, Université de Limoges, France

Xavier Derobert, Université Gustave Eiffel, France

Aliou Diallo, Université Côte d'Azur, CNRS, France

Walid El Hadj, Intel Corporation, France
Karu Esselle, University of Technology Sydney, Australia
Cyrille Fauchard, CEREMA, France
Alessandro Fedeli, University of Genoa, Italy
Fabien Ferrero, Université Côte d'Azur, CNRS, France
Nicolas Fortino, Université Côte d'Azur, CNRS, France
Takafumi Fujimoto, Nagasaki University, Japan
Shunichi Futatsumori, National Institute of Maritime, Port and Aviation Technology, Japan
Saeed Haydhah, Concordia University, Canada
Thi Quynh Van Hoang, Thales Research & technology, France
Guanlong Huang, Foshan University, China
Laure Huitema, CNRS, Université de Limoges, France
Tetsuya Kawanishi, Waseda University, Japan
Francis Keshmiri, Huawei Technologies, France
Akiko Kohmura, National Institute of Maritime, Port and Aviation Technology, Japan
Satoru Kurokawa, National Institute of Advanced Industrial Science and Technology, Japan
Giuseppe Labate, TNO, The Netherlands
Jérôme Lanteri, Université Côte d'Azur, CNRS, France
Minh Thuy Le, Hanoi University of Science and Technology, Vietnam
Giovanni Leone, University of Campania, Italy
Benoît Lesur, Safran Data Systems, France
Pierre Lemaitre-Verger, University Grenoble Alpes, France
Anne-Claire Lepage, Telecom ParisTech, France
Benoît Lesur, Safran Data Systems, France
Philippe Le Thuc, Université Côte d'Azur, CNRS, France
Kwok Wa Leung, City University of Hong Kong, SAR China
Tran Van Lic, Da Nang University, Vietnam
Wei Lin, The Hong Kong Polytechnic University, Hong Kong SAR, China
Xiyao Liu, Shenzhen University, China
Leonardo Lizzi, University of Trento, Italy
Guido Lombardi, Politecnico di Torino, Italy
Maria Antonia Maisto, Università degli Studi della Campania Luigi Vanvitelli, Italy
Stéphane Méric, INSA Rennes, IETR, France
Claire Migliaccio, Université Côte d'Azur, CNRS, France
Binh Duong Nguyen, Ho Chi Minh City International University, Vietnam
Ngoc Truong Minh Nguyen, Ho Chi Minh City International University, Vietnam
Khai Tran Quang Nguyen, Thales Group, France
Mai-Khanh Ngoc Nguyen, Marvell, Vietnam
Manh-Thao Nguyen, Université Côte d'Azur, CNRS, France
Truong-Khang Nguyen, Van Lang University, Vietnam
Nghia Nguyen-Trong, Nextwaves Industries, Vietnam
Declan O'Loughlin, Trinity College Dublin, Ireland
Won-Kwang Park, Koomin University, Korea

Teodor Petrita, Politehnica University of Timisoara & ANCOM, Romania
Kien Trung Pham, Ho Chi Minh City International University, Vietnam
Christian Pichot, Université Côte d'Azur, CNRS, France
Cristina Ponti, Roma Tre University, Italy
Yannis Pousset, Université de Poitiers, CNRS, France
Peiyuan Qin, University of Technology Sydney, Australia
Mohamed Kamal A. Rahim, Universiti Teknologi, Malaysia
Andrea Randazzo, University of Genoa, Italy
Javier Rosado-Sanz, University of Alcalá, Spain
Pierre Sabouroux, Institut Fresnel, France
Hélène Roussel, Sorbonne Université, CNRS, France
Kunio Sakakibara, Nagoya Institute of Technology, Japan
Marco Salucci, University of Trento, Italy
Valentina Schenone, University of Genoa, Italy
Giuseppe Schettini, Roma Tre, Italy
Zijian Shao, Princeton University, USA
Satish K. Sharma, San Diego State University, USA
Jawad Y. Siddiqui, Royal Military College of Canada, Canada
Romain Siragusa, Grenoble INP, France
Raffaele Solimene, Università degli Studi della Campania "L. Vanvitelli"
Robert Staraj, Université Côte d'Azur, CNRS, France
Razvan Tamas, Constanta Maritime University, Romania
Mei Song Tong, Université Côte d'Azur, CNRS, France
Hung Huy Tran, Phenikaa University, Vietnam
Emanuelle Tavanti, University of Pisa, Italy
Smail Tedjini, University Grenoble Alpes, France
Lionel Tombakdjian, Université Côte d'Azur, CNRS, France
Nguyen Minh Tran, University of Engineering and Technology, Vietnam
Le-Huy Trinh, University of Information and Technology & Vietnam National University, Vietnam
Giuseppe Virone, CNR-IEIIT, Italy
Francesca Vipiana, Politecnico di Torino, Italy
Tan-Phu Vuong, Grenoble INP, France
Nan Yang, Sun Yat-Sen University, China
Naruto Yonemoto, ENRI, National Institute of Maritime, Port and Aviation Technology, Japan
Shaoyong Zheng, Sun Yat-Sen, University, China

SPECIAL SESSIONS

SPS01	<p>Microwaves and Artificial Intelligence: A New Paradigm for Improved Diagnostics Organizer: Sandra Costanzo, University of Calabria, Italy Contact: costanzo@deis.unical.it</p>
SPS02	<p>Broadband and Reconfigurable Antennas Organizers: Binh Duong Nguyen and Kien Trung Pham, Ho Chi Minh City International University, Vietnam Contact: nbduong@hcmiu.edu.vn, ptkien@hcmiu.edu.vn</p>
SPS03	<p>Advances in Reconfigurable Antennas Organizers: Truong-Khang Nguyen, Van Lang University, Vietnam; Nghia Nguyen-Trong, Nextwaves Industries, Vietnam Contact: khang.nt@vlu.edu.vn, nghia.nguyen@nextwaves.industries</p>
SPS04	<p>Millimeter-Wave and Terahertz-wave antennas Organizer: Kunio Sakakibara, Nagoya Institute of Technology, Japan Contact: sakaki@nitech.ac.jp</p>
SPS05	<p>Advanced Millimeter-Wave and THz-Wave Systems and Applications Organizers: Mai-Khanh Ngoc Nguyen, Marvell, Vietnam; Tetsuya Kawanishi, Waseda University, Japan Contact: nguyenn1@marvell.com, kawanishi@waseda.jp</p>
SPS06	<p>Emerging Antenna Techniques for Next G New Radios Organizers: Zijian Shao, Princeton University, USA; Xiyao Liu, Shenzhen University, China Contact: zijianshao@princeton.edu, xiyaoliu@szu.edu.cn</p>
SPS07	<p>Integrated Antenna for IoT Applications Organizers: Minh Thuy Le, Hanoi University of Science and Technology, Vietnam; Le-Huy Trinh, University of Information Technology, Vietnam National University Ho Chi Minh, Vietnam Contact: thuy.leminh@hust.edu.vn, huytl@uit.edu.vn</p>
SPS08	<p>Low-Latency Satellite Communications and Imagery Organizer: Ngoc Truong Minh Nguyen, Ho Chi Minh City International University, Vietnam Contact: nntminh@hcmiu.edu.vn</p>
SPS09	<p>AMTA Session: Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies Organizers: Satoru Kurokawa, National Metrology Institute of Japan, Japan AMTA Node, Japan; Peiyuan Qin, University of Technology Sydney, Australian AMTA Node, Australia Contact: satoru-kurokawa@aist.go.jp, peiyuan.qin@uts.edu.au</p>
SPS11	<p>Emergent Technologies in Wireless Communications Systems Organizers: Kwok Wa Leung, City University of Hong Kong, Hong Kong SAR, China; Shaoyong Zheng, Sun Yat-Sun University, China Contact: eekleung@cityu.edu.hk, zhengshaoy@mail.sysu.edu.cn</p>
SPS13	<p>Electromagnetic Inverse Scattering and Imaging: Theory and Applications Organizers: Won-Kwang Park, Kookmin University, Korea; Andrea Randazzo, Alessandro Fedeli, University of Genoa, Italy; Raffaele Solimene, Università degli Studi della Campania "L. Vanvitelli" Contact: parkwk@kookmin.ac.kr, andrea.randazzo@unige.it, alessandro.fedeli@unige.it, raffaele.solimene@unicampania.it</p>
SPS15	<p>Antenna Measurement and Optimization for Wireless-Related Features and Applications Organizers: Fabien Ferrero, Université Côte d'Azur, CNRS, France; Walid El Hajj, Intel Corporation, France Contact: fabien.ferrero@univ-cotedazur.fr, walid.el.hajj@intel.com</p>
SPS16	<p>Transmit and Reflect Array Design and Measurement Methods in the mmW and THz Range The aim is to set up a session grouping papers on the design of agile radiating surfaces in transmission or reflection modes, for near-field applications (focusing, imaging, etc.) or far-field applications (beam-forming for telecommunications and radars) in very high frequency ranges. The characterization aspect and associated test benches will also be highlighted, as they represent a major challenge at these frequencies. Organizers: Cyril Decroze and Aurelian Crunteanu, Xlim, Université de Limoges, CNRS, France Contact: cyril.decroze@xlim.fr, aurelian.crunteanu@xlim.fr</p>
SPS19	<p>IEEE AP-S SIGHT: Antenna Design for Low-Cost, High-Impact Humanitarian Projects Organizers: Jawad Y. Siddiqui, IEEE AP-S SIGHT, Royal Military College of Canada, Canada; Satish K. Sharma, IEEE AP-S SIGHT, San Diego State University, USA Contact: jys.rpe@gmail.com, ssharma@sdsu.edu</p>
SPS20	<p>Antenna Applications for Infrastructures Organizer: Naruto Yonemoto, Electronic Navigation Research Institute (ENRI), National</p>

	Institute of Maritime, Port and Aviation Technology (MPAT) Contact: yonemoto@mpat.go.jp
SPS21	<p>Advanced Antenna Techniques for Navigation</p> <p>This topic aims to address new development in the navigation application. The spectrum can be quite large as it addresses of course the GNSS systems but also the newly developed LEO constellations or any kind of alternative PNT related techniques.</p> <p>Organizers: Lionel Tombakdjian, Université Côte d'Azur, CNRS, France; Noori BniLam, European Space Agency (ESA) Contact: lionel.tombakdjian@univ-cotedazur.fr, noori.bniam@esa.int</p>
SPS22	<p>Antennas With Enhanced Polarization Characteristics</p> <p>The session is intended to gather works related to the design, optimization, measurement, and integration of circularly polarized antennas, dual polarization antennas, antennas with polarization diversity, etc.</p> <p>Organizers: Leonardo Lizzi, University of Trento, Italy; Takafumi Fujimoto, Nagasaki University, Japan Contact: leonardo.lizzi@unitn.it, takafumi@nagasaki-u.ac.jp</p>
SPS23	<p>Antenna and Propagation for Wireless System and Beyond</p> <p>Organizer: Mohamad Kamal A Rahim, Universiti Teknologi Malaysia, Malaysia Contact: mdkamal@utm.my</p>
SPS24	<p>IEC TC 103 - Transmitting and Receiving Equipment for Radiocommunication</p> <p>Scope: Standardization of transmitting equipment for radiocommunications purposes and electronic and optical devices employing similar techniques. The standardization work deals with methods of measurement, safety requirements and transmitter control and interconnection.</p> <p>Organizers: Satoru Kurokawa, and Michitaka Ameya, National Metrology Institute of Japan, National Institute of Advanced Industrial Science and Technology (AIST) Contact: satoru-kurokawa@aist.go.jp, m.ameya@aist.go.jp</p>
SPS25	<p>Innovative Millimeter-Wave Antenna Design and Measurement Techniques</p> <p>Organizers: Wei Lin, The Hong Kong Polytechnic University, Hong Kong SAR, China; Guanlong Huang, Foshan University, China; Nan Yang, Sun Yat-Sen University, China Contact: w.lin@polyu.edu.hk, hgl@fosu.edu.cn, yangnan6@mail.sysu.edu.cn</p>
SPS26	<p>Reconfigurable Antennas for 5G mmWave</p> <p>Organizers: Aliou Diallo and Robert Staraj, LEAT, Université Côte d'Azur, CNRS, France Contact: aliou.diallo@univ-cotedazur.fr, robert.staraj@univ-cotedazur.fr</p>
SPS27	<p>LP-WAN Applications and Experiments in Da Nang Region</p> <p>Organizers: Tran Van Lic, DUT, Da Nang University, Vietnam; Manh Thao Nguyen, Université Côte d'Azur, CNRS, France Contact: tvlic@dut.udn.vn, manh-thao.nguyen@univ-cotedazur.fr</p>

CONFERENCE VENUE

The conference is held at Pullman Danang Beach Resort, 101 vo nguyen giap street, khue my ward, ngu hanh son district, Da Nang 550000, Vietnam. <https://www.pullman-danang.com>

REGISTRATION

Registration will be open on

CONFERENCE PROGRAM

The online updated conference program

<https://2024ieeecama.org/program>

PROCEEDINGS

Available for downloading from the conference website

<https://2024ieeecama.org>

WI-FI

A complementary Wi-Fi connection will be provided inside the Pullman hotel to all attendees.

PROGRAM AT A GLANCE

Tuesday 8				
15:00-19:00	Registration			
16:00-18:00	Visit to Lady Budha Pagoda. Bus departure from Pullman Beach at 16:00.			
Wednesday 9				
07:45-08:45	Registration			
08:45-09:30	Lotus Ballroom - Opening Ceremony			
09:30-10:30	Lotus - KN1: Keynote Lecture 1 Innovative Antenna Designs for Next-Generation CubeSats: Conceptualization to Mission Realization Prof. Yahya Rahmat-Samii University of California, Los Angeles, USA			
10:30-11:00	Lotus Ballroom Hall - Coffee Break			
11:00-12:00	Lotus - KN2: Keynote Lecture 2 Near-Field MetaSteering – A Method for Complete Steering of the Beam of Any Fixed-Beam Antenna Prof. Karu Esselle University of Technology Sydney, Australia			
12:00-13:00	Epice Restaurant - Lunch			
13:00-15:00	Lotus 1	Lotus 2	Lotus 3	Jasmin
	Special Session SPS11 - I Emergent Technologies in Wireless Communications Systems Chairs: K.W. Leung, S. Zheng 1571044772 1571048427 1571056423 1571049583 1571044430 Discussion	Special Session SPS20 Antenna Applications for Infrastructures Chair: N. Yonemoto 1571049423 1571047078 1571043023 1571049434 1571043960 Discussion	Special Session SPS09 - I AMTA Session: Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies Chairs: S. Kurokawa, P. Qin 1571043167 1571046389 1571043601 1571047503 1571047599 Discussion	Regular Session E04 Radar Technology and Processing Chair: TBD 1571049592 1571044566 1571047152 1571046937 Discussion
15:00-15:20	Lotus Ballroom Hall - Coffee Break			
15:20-17:30	Special Session SPS11 - II Emergent Technologies in Wireless Communications Systems Chairs: K.W. Leung, S. Zheng 1571048677 1571048265 Discussion Special Session SPS06 Emerging Antenna Techniques for Next G New Radios Chairs: Z. Shao, X. Liu, D.-N. Tran-Viet 1571047300 1571047442 1571014653 Discussion	Session SPS22 Antennas With Enhanced Polarization Characteristics Chairs: T. Fujimoto, L. Lizzi, 1571046680 1571047572 1571047561 1571049319 Discussion	Special Session SPS09 - II AMTA Session: Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies Chairs: S. Kurokawa, P. Qin 1571044279 1571047420 1571048829 Regular papers M01 for AMTA session 1571032387 1571044599 Discussion	Regular Session E01 Modeling, Simulations & Predictions of Measurement in Realistic Conditions Chair: TBD 1571039618 1571047643 1571046671 1571044293 Discussion
17:30-19:30	Beach Terrasse or Epice Restaurant (depending on weather) - Welcome Reception			

Thursday 10	Lotus 1	Lotus 2	Lotus 3	Jasmin
08:00-10:00	<p>Special Session SPS03 - I Advances in Reconfigurable Antennas Chairs: T.K. Nguyen, N. Nguyen-Trong 1571047285 1571047635 1571044138 1571045745 1571046019 Discussion</p>	<p>Special Session SPS05 - I Advanced MMW & THzW Systems & Applications Chairs: M.-K. N. Nguyen, T. Kawanishi 1571046868 1571047007 1571047430 1571048870 1571047460 discussion</p>	<p>Special Session SPS07 - I Integrated Antenna for IoT Applications Chairs: M.T. Le, L.-H. Trinh 1571044241 1571047093 1571043639 1571047454 Discussion</p>	<p>Regular Session M01, M15 - I Antenna Measurements & Measurement Techniques Chair: TBD 1571044813 1571049079 1571042988 1571047417 1571045781 Discussion</p>
10:00-10:20	Lotus Ballroom Hall - Coffee Break			
10:20-12:00	<p>Special Session SPS03 - II Advances in Reconfigurable Antennas Chairs: T.K. Nguyen, N. Nguyen-Trong 1571047157</p> <p>Special Session SPS02 - I Broadband & Reconfigurable Antennas Chairs: B.D. Nguyen, K.T. Pham 1571046719 1571047640 1571045651 1571047258</p>	<p>Special Session SPS05 - II Advanced MMW & THzW Systems & Applications Chairs: M.-K. N. Nguyen, T. Kawanishi 1571046969 1571047340 1571047798 1571049022 1571046811</p>	<p>Special Session SPS07 - II Integrated Antenna for IoT Applications Chairs: M.T. Le, L.-H. Trinh 1571047394 1571047414 1571047383</p> <p>Special Session SPS25 Innovative MMW Antenna Design & Measurement Techniques Chairs: W. Lin, G. Huang, N. Yang 1571044188 Discussion</p>	<p>Regular Session M01, M15 - II Antenna Measurements & Measurement Techniques Chair: TBD 1571046725 1571046387 1571044514 1571047870 1571046240</p>
12:00-13:00	Epice Restaurant - Lunch			
13:00-15:00	<p>Special Session SPS02 - II Broadband & Reconfigurable Antennas Chairs: B.D. Nguyen, K.T. Pham 1571047358 1571044927 Discussion</p> <p>Special Session SPS15 Antenna Measurement & Optimization for Wireless-Related Features & Applications Chairs: F. Ferrero, W. El Hajj 1571044217 1571047891 1571047885 Discussion</p>	<p>Special Session SPS05 - III Advanced MMW & THzW Systems & Applications Chairs: M.-K. N. Nguyen, T. Kawanishi 1571053963 1571048919 1571042912 1571047712 Discussion</p> <p>Special Session SPS16 Transmit & Reflect Array Design & Measurement Methods in the MMW & THz Range Chairs: C. Decroze, A. Crunteanu 1571043280 Discussion</p>	<p>Special Session SPS23 Antenna & Propagation for Wireless System & Beyond Chair: M. K. A. Rahim 1571047872 1571047874</p> <p>Special Session SPS26 Reconfigurable Antennas for 5G mmWave Chair: R. Staraj 1571043763</p> <p>Regular Session M01, M15 - III Antenna Measurements & Measurement Techniques Chair: TBD 1571042715 1571044689</p>	
15:00-15:20	Lotus Ballroom Hall - Coffee Break			
15:20-17:30	<p>Special Session SPS24 IEC TC 103 Chairs: S. Kurokawa, M. Ameya 1571047392 1571048929 1571057120 Discussion</p>	<p>Special Session SPS04 MMW & THz Wave Antennas Chair: K. Sakakibara 1571047393 1571047391 1571043819 1571044746 1571044028 1571044771 Discussion</p>	<p>Special Session SPS19 IEEE AP-S SIGHT Antenna Design for Low-Cost, High-Impact Humanitarian Projects Chair: S.K. Sharma 1571046738 1571045900 1571047308 1571047647 Panel Discussion</p>	
18:00-19:00	Performances by Vietnamese artisans and traditional artists			

19:00-22:00

Lotus Ballroom - Gala Dinner

Program

Hosts: Xuâm Kiêu & Christian Pichot

18:00-19:00: Free Check in - Visit and watch performances by Vietnamese artisans and traditional artists -

"Ao Dai" is prepared for guests to take pictures

From 19:00: Gala dinner

- Christian Pichot presents briefly the program of the Gala Dinner
- Xuâm Kiêu introduces "Cham" Dance – Central Region
- Gala opening speech by Christian Pichot (IEEE AP-S President representative)
- Christian Pichot introduces IEEE, IEEE AP-S Geographical Activities, IEEE CAMA previous editions and CAMA10th anniversary
- Christian Pichot cuts the birthday cake to celebrate IEEE CAMA 10th anniversary
- Xuâm Kiêu introduces the North – "Bac Ninh Quan Ho" Dance
- Soloist playing the "Tơ Rừng" instrument
- Singers
- Xuâm Kiêu introduces the South – Southern Dance
- Soloist playing the "Đờ Bầu" instrument
- "Non lá" painting performance
- Singers
- Artists performing the "Nhị" instrument
- Interact and play games with ethnic artists
- Games
- Dancing
- Karaoke
- "Non lá" gifts for all participants

Friday 11	Lotus 1	Lotus 2	Lotus 3	Jasmin
08:00-10:00	Special Session SPS27 - I LP-WAN Applications and Experiments in Da Nang Region Chairs: T. Van Lic, M. T. Nguyen 1571046430 1571046378 1571046351 1571048395 1571046341 Discussion	Special Session SPS13 EM inverse scattering & Imaging: Theory & Applications Chairs: W.K. Park, A. Cuccaro 1571043063 1571047822 1571037790 1571048149 Discussion	Special Sessions SPS08 & SPS21 Low-Latency Satellite Communications & Imagery & Navigation Chair: N. T. M. Nguyen & L. Tombakdjian 1571048342 1571047740 1571044200 1571046197 Discussion	Regular Sessions A01, A02 Antenna & Antenna Array Design Chair: TBD 1571043970 1571018502 1571047032 1571047521 1571047606 Discussion
10:00-10:20	Lotus Ballroom Hall - Coffee Break			
10:20-12:00	Special Session SPS27 - II LP-WAN Applications and Experiments in Da Nang Region Chairs: T. Van Lic, M. T. Nguyen 1571046348 1571048361 Panel Discussion	Special Session SPS01 Microwaves & Artificial Intelligence: A New Paradigm for Improved Diagnostics Chairs: S. Costanzo 1571047293 1571047287 Discussion	Regular Session A22 Communications Chair: TBD 1571041146 1571040769 1571042789 1571045222 1571040982	Regular Sessions A02, A04 Antenna & Antenna Array Design & Wideband Antennas Chair: TBD 1571018938 1571043873 1571043364 1571042555 1571043931
12:00-13:00	Epice Restaurant - Lunch			
13:00-14:00	Lotus Ballroom - Closing Ceremony			
14:00-21:00	Half-Day Social Event for All Attendees: Marble Mountain and Hoi An Ancient Town			

FULL PROGRAM

2024 IEEE Conference on Antenna Measurements and Applications (CAMA) Program

Saigon time	Tuesday, October 8	Wednesday, October 9	Thursday, October 10	Friday, October 11
7:45 - 8:00		<u>Registration</u>		
8:00 - 8:45			Regular Session M01, M15 - I - : <u>Antenna Measurements & Measurement Techniques</u>	Regular Session A01, A02: <u>Antenna & Antenna Array Design</u>
8:45 - 9:30		<u>Opening Ceremony</u>	Special Session SPS03 - I - : <u>Advances in Reconfigurable Antennas</u>	Special Session SPS13: <u>EM inverse scattering & Imaging: Theory & Applications</u>
9:30 - 10:00		KN1 - Keynote Lecture 1: <u>Innovative Antenna Designs for Next-Generation CubeSats: Conceptualization to Mission Realization</u>	Special Session SPS05 - I - : <u>Advanced MMW & THzW Systems & Applications</u>	Special Session SPS27 - I - : <u>LP-WAN Applications and Experiments in Da Nang Region</u>
10:00 - 10:20			Special Session SPS07 - I - : <u>Integrated Antenna for IoT Applications</u>	Special Sessions SPS08 & SPS21: <u>Low-Latency Satellite Communications & Imagery & Navigation</u>
10:20 - 10:30			<u>Coffee Break</u>	<u>Coffee Break</u>
10:30 - 10:40		<u>Coffee Break</u>	Special Session SPS03 - II - : <u>Advances</u>	Special Session SPS07 - II - : <u>Integrated</u>
			Regular Session M01, M15 - II - : <u>Antenna</u>	Regular Session A22: <u>Communications</u>

10:40 - 1:00		<u>in Reconfigurable Antennas</u>	<u>Antenna for IoT Applications</u>	<u>Measurements & Measurement Techniques</u>	<u>Artificial Intelligence: A New Paradigm for Improved Diagnostic</u>	Regular Sessions A02, A04: <u>Antenna & Antenna Array Design & Wideband Antennas</u>
11:00 - 1:20	KN2 - Keynote Lecture 2: <u>Near-Field MetaSteering - A Method for Complete Steering of the Beam of Any Fixed-Beam Antenna</u>	Special Session SPS02 - I -: <u>Broadband & Reconfigurable Antennas</u>	Special Session SPS25: <u>Innovative MMW & THzW Systems & Applications</u>	Special Session SPS05 - II -: <u>Advanced MMW & THzW Systems & Applications</u>	<u>Special Session SPS05 - II -: Advanced MMW & THzW Systems & Applications</u>	Special Session SPS27 - II -: <u>LP-WAN Applications and Experiments in Da Nang Region</u>
11:20 - 12:00		<u>Lunch</u>	<u>Lunch</u>		<u>Lunch</u>	
12:00 - 13:00	Regular Session E04: <u>Radar Technology and Processing</u>	Special Session SPS09 - I -: <u>AMTA Session: Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies</u>	Special Session SPS23: <u>Antenna & Propagation for Wireless System & Beyond</u>	Special Session SPS02 - II -: <u>Broadband & Reconfigurable Antennas</u>		
13:00 - 13:40	Special Session SPS09 - I -: <u>AMTA Session: Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies</u>	Special Session SPS26: <u>Reconfigurable Antennas for 5G mmWave</u>	Special Session SPS26: <u>Reconfigurable Antennas for 5G mmWave</u>	Special Session SPS05 - III -: <u>Advanced MMW & THzW Systems & Applications</u>	<u>Closing Ceremony</u>	
13:40 - 14:00	Special Session SPS11 - I -: <u>Emergent Technologies in Wireless Communications</u>	Regular Session M01, M15 - III -: <u>Antenna Measurements & Measurement Techniques</u>	Regular Session M01, M15 - III -: <u>Antenna Measurements & Measurement Techniques</u>	Special Session SPS15: <u>Antenna Measurement & Optimization for Wireless-Related Features & Applications</u>		
14:00 - 14:30	Special Session SPS11 - I -: <u>Emergent Technologies in Wireless Communications</u>			Special Session SPS15: <u>Antenna Measurement & Optimization for Wireless-Related Features & Applications</u>		
14:30 - 5:00				Special Session SPS16: <u>Transmit & Reflect Array Design & Measurement Methods in the MMW & THz</u>	<u>Half-Day Social Event for All Attendees</u>	

Special
Session
SPS20:
Antenna
Application
s for
Infrastructu
res

15:00 - 1
5:20

Coffee
Break

Coffee
Break

15:20 - 1
6:00

Special Regular
Session Session
SPS11 - II -: E01:
Emergent Modeling,
Technologie Simulatio
s in ns &
Wireless Prediction
Communica s of
tions Measurem
Systems ent in

Special
Session
SPS04:
MMW &
THz Wave
Antennas

16:00 - 1
6:10

Special
Session
SPS09 - II
-: AMTA Special
Session: Session
Antenna SPS19:
Measurem IEEE AP-
ent and S SIGHT
Related Antenna
Technolog Design
for Low-

Registra Visit
tion Lady
Budh
a Special
Pago Session
da SPS06:
Emerging
Antenna
Techniques
for Next G
New Radios

16:10 - 1
7:30

Special
Session
SPS06:
Emerging
Antenna
Techniques
for Next G
New Radios
Technolog
ies Projects
including Special
RoF Session
Technolog SPS24:
ies IEC TC
Special 103
Session
SPS22:
Antennas
With
Enhanced
Polarizati
on
Character
istics

17:30 - 1
8:00

Welcome
Reception

18:00 - 1
9:00

Performances by
Vietnamese artisans
and
traditional
artists

19:00 - 1
9:00

19:00 - 1
9:30

Gala
Dinner

19:30 - 2
1:00

21:00 - 2
2:00

Tuesday, October 8

Tuesday, October 8 15:00 - 19:00

Registration

Tuesday, October 8 16:00 - 18:00

Visit Lady Budha Pagoda

Bus departure from Pullman Beach at 16:00

Chairs: Fabien Ferrero, Christian Y. Pichot

Wednesday, October 9

Wednesday, October 9 7:45 - 8:45

Registration

Wednesday, October 9 8:45 - 9:30

Opening Ceremony

Room: Lotus Ballroom

Chair: Christian Y. Pichot

Wednesday, October 9 9:30 - 10:30

KN1 - Keynote Lecture 1: Innovative Antenna Designs for Next-Generation CubeSats: Conceptualization to Mission Realization

Yahya Rahmat-Samii, Distinguished Professor, University of California, Los Angeles, USA

Room: Lotus Ballroom

Chair: Christian Y. Pichot

Wednesday, October 9 10:30 - 11:00

Coffee Break

Room: Lotus Ballroom Hall

Wednesday, October 9 11:00 - 12:00

KN2 - Keynote Lecture 2: Near-Field MetaSteering - A Method for Complete Steering of the Beam of Any Fixed-Beam Antenna

Karu Esselle, Distinguished Professor, University of Technology Sydney, Australia

Room: Lotus Ballroom

Chair: Fabien Ferrero

Wednesday, October 9 12:00 - 13:00

Lunch

Room: Epice Restaurant

Wednesday, October 9 13:00 - 15:00

Regular Session E04: Radar Technology and Processing

Room: Jasmin

13:00 *Wideband L-Probe Fed Antenna-In-Package Module for Millimeter-Wave Radar*

Zheng Fang, Kai Lu, Nan Yang and Shaoyong Zheng

13:20 *Localization of Marker Particles in Bulk Materials Utilizing a MIMO Radar Approach*

Francesca Schenkel, Jonas Schorlemer, Ilona Rolfes and Christian Schulz

13:40 *An Improvement of Accuracy for FMCW Radar Based Gesture Recognition System Using Deep Learning Models*

Dung Trinh, Truc Chanh Nguyen and Kiet T. Vo

14:00 *Synchronized and Programmable X-Band Exciter With Low SWaP Solution for Radar Application*

Arpana MK, Vipin Kumar H, Vikas Kumar and Venkatamuni T

14:20 Discussion

Special Session SPS09 - I -: AMTA Session: Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies

Room: Lotus 3

Chairs: Satoru Kurokawa, Peiyuan Qin

13:00 *Antenna Vector Performance Measurement Using the Antenna-Coupled Electrode Electro-Optic Modulator for 80 GHz Band*

Satoru Kurokawa, Michitaka Ameya, Hiroshi Murata, Masatoshi Onizawa and Masahiro Sato

13:20 *W-Band Antenna-Coupled Electrode Electro-Optic Modulator for Millimeter-Wave Sensor System*

Hiroshi Murata, Yui Otagaki, Masahiro Sato, Masatoshi Onizawa and Satoru Kurokawa

13:40 *Aperture-Field Synthesis of Circularly Polarized Folded Reflectarray Antennas*

Makoto Sano, Ryuji Kuse and Takeshi Fukusako

14:00 *Contactless PIM Measurement Method Using a Balanced Stripline*

Nobuhiro Kuga

14:20 *Development of Feeding Network With Beamforming Feature for Local Positioning System*

Thirza Nabila Syafriady, Sarah Rahayu, Budi Syihabuddin, Novelita Rahayu, Hartuti Mistialustina and Achmad Munir

14:40 Panel Discussion

Special Session SPS11 - I -: Emergent Technologies in Wireless Communications Systems

Room: Lotus 1

Chairs: Kwok Wa Leung, Shaoyong Zheng

13:00 *A Wideband Traveling-Wave Endfire Glass Antenna*

Shang Jun Li, Peng Fei Hu and Kwok Wa Leung

13:20 *Wideband Omnidirectional Dielectric Resonator Antenna Using Air and Dielectric Vias*

Shi-Xuan Zhang, Kwok Wa Leung and Mike W. K. Lee

13:40 *Dual-Frequency Dual-Polarized Omnidirectional Duplex Antenna for 4G/5G Communications*

Xu Han, Ms., Peng Fei Hu and Kwok Wa Leung

Special Session SPS11 - I -.4 14:00 *Pattern Ripples Caused by Finite Ground for Antenna-In-Package*

Yexiong Deng, Kai Lu, Zheng Fang, Nan Yang and Yunliang Long

Special Session SPS11 - I -.5 14:20 *Surrogate-Assisted PSO for Patch Antenna Designs*

Kai Fu and Kwok Wa Leung

14:40 Discussion

Special Session SPS20: Antenna Applications for Infrastructures

Room: Lotus 2

Chairs: Shunichi Futatsumori, Naruto Yonemoto

13:00 *Frequency Sharing Study of Satellite and Radiodetermination Services in the 90-GHz Band*

Nobuhiko Shibagaki

13:20 *Microwave Signal/Power Transfer Using Degenerated Guided-Modes Propagating Over FRPM Pipe-Wall*

Kazuki Takigawa, Yuri Kasai, Tadahiro Okuda, Masaya Hazama, Yui Otagaki and Hiroshi Murata

13:40 *3D Vibration Imaging Radar (3D-VirA) for Infrastructure Monitoring*

Hiroshi Nohmi, Ikuo Shirai and Akira Nohmi

14:00 *International Technical Standard Conformity Evaluation of an Airport Runway Foreign Object Debris Detection Prototype System Based on a 96-GHz Millimeter-Wave Radar*

Shunichi Futatsumori, Noriaki Hiraga, Naruto Yonemoto, Nobuhiko Shibagaki, Yosuke Sato and Kenichi Kashima

14:20 *Assessing High-Intensity Radiated Fields (HIRF) From High-Power Antennas for Air Vehicle Safety*

Truong Nguyen

14:40 Discussion

Wednesday, October 9 15:00 - 15:20

Coffee Break

Room: Lotus Ballroom Hall

Wednesday, October 9 15:20 - 17:30

Regular Session E01: Modeling, Simulations & Predictions of Measurement in Realistic Conditions

Room: Jasmin

15:20 *Simulation of 420MHz Electromagnetic Fields Leakage From a Helicopter Ambulance*

Isao Kayano, Aya Takayama and Seiichi Mochizuki

15:40 *Effect of Source Polarization on Computed Tomography Using Low Frequency Electromagnetic Energy*

Omar Ramahi, Hamid Akbari-Chelaresi, Mauricio Hernandez and Ghazaleh Tashtarian

16:00 *Microwave Brain Lesion Detection and Localization Using Classification Algorithms*

Hulya Sahinturk, Birol Aslanyürek, Rabia Kiyamaz, Hülya Gökçe Süngülü and Ibrahim Akduman

16:20 *Enhanced Early Detection of Breast Cancer: Integrating XGBoost With SAFE, a Novel Microwave Imaging System*

Ibrahim Akduman, Aleksandar Janjic and Ali Yurtseven

16:40 Discussion

Special Session SPS09 - II -: AMTA Session: Antenna Measurement and Related Technologies for Next Generation Wireless Technologies including RoF Technologies

Room: Lotus 3

Chairs: Satoru Kurokawa, Peiyuan Qin

15:20 *Efficient Sampling Method for 2D-Bistatic RCS Measurement Using Cylindrical Near-Field to Far-Field Transformation and Iterations by Gaussian Process Regression*

Michitaka Ameya and Yuto Kato

15:40 *A Low-Profile CPW-Fed Spline-Based Antenna for In-Flight Spectrum Surveillance System*

Agus D. Prasetyo, Deny Hamdani and Achmad Munir

16:00 *Assessment of Wearable Coated-Textile Patch Antenna Performances in IoT Application*

Muhammad Naufal Arira, Trasma Yunita, Agus D. Prasetyo and Achmad Munir

16:20 *A Pragmatic Radiation Pattern Measurement Technique for UHF RFID Reader Antennas*

Prabakar Parthiban

16:40 *Optical Waveguide Electrooptic Probe for Field-Calibrated Antenna Measurement*

Dong-Joon Lee, In-June Hwang and Young-Pyo Hong

17:00 Discussion

Wednesday, October 9 15:20 - 16:10

Special Session SPS11 - II -: Emergent Technologies in Wireless Communications Systems

Room: Lotus 1

Chairs: Kwok Wa Leung, Shaoyong Zheng

15:20 *Beam-Tunable Low-Profile High-Gain Dielectric Resonator Antenna Array for Wireless Backhauling*

Xu Zhou, Peng Fei Hu and Kwok Wa Leung

15:40 *A Compact Coupling Suppression Method for 1×8 Millimeter Wave Antenna Array*

DaCheng Huang, Yiming Zhang and Tianyan Lan

16:00 Discussion

Wednesday, October 9 15:20 - 17:30

Special Session SPS22: Antennas With Enhanced Polarization Characteristics

Room: Lotus 2

Chairs: Takafumi Fujimoto, Leonardo Lizzi

15:20 *A Circularly Polarized UWB Antenna for Improved Positioning Accuracy*

Leonardo Lizzi, Davide Molteni, Gian Pietro Picco, Amina Benouakta and Fabien Ferrero

15:40 *A Printed Hybrid-Mode Antenna for Dual-Band Circular Polarization*

Takafumi Fujimoto and Chai-Eu Guan

16:00 *Enhancement of Gain in Circularly Polarized Printed Monopole Antenna for UWB Application*

Zin Mar Phyo, Takafumi Fujimoto, Kaoru Mine and Chai-Eu Guan

16:20 *Low-Cost Archimedean Spiral Antenna for L-Band and S-Band Satellite Communication Terminal*

Fabien Ferrero, Le Huy Trinh, Robert Staraj and Manh-Thao Nguyen

16:40 Discussion

Wednesday, October 9 16:10 - 17:30

Special Session SPS06: Emerging Antenna Techniques for Next G New Radios

Room: Lotus 1

Chairs: Xiyao Liu, Duc-Nguyen Tran-Viet

16:10 *A Compact Four-Port MIMO Antenna With Wideband Operation*

Anh Tran-Tuan, Duc-Nguyen Tran-Viet, Noi Truong-Quang and Hung Huy Tran

16:30 *The Decoupled Two Closely Distributed Omnidirectional PIFAs Using A Meander Line*

Zheyuan Xu and Xiyao Liu

16:50 *Omnidirectional Printed Filtering Dipole Antenna With Folded Structures*

Xiyao Liu, Tianming Mai and Ken Ning

17:10 Discussion

Wednesday, October 9 17:30 - 19:30

Welcome Reception

Room: Beach Terrasse or Epic Restaurant (depending on weather)

Chair: Christian Y. Pichot

Thursday, October 10

Thursday, October 10 8:00 - 10:00

Regular Session M01, M15 - I -: Antenna Measurements & Measurement Techniques

Room: Jasmin

8:00 *Measurement of Multiband Complex Permittivity by Multi-Point Method*

Qin Shi, Qing-Xin Chu and Fu-Chang Chen

8:20 *A Reconfigurable Phase-Difference Coupler for Beamforming Network-Based Multibeam Antenna*

Zulfi Zulfi, Budi Syihabuddin and Achmad Munir

8:40 *Active Integrated Antenna for the Power Density Measurement of Millimeter Wave Base Station*

DukSoo Kwon, Sangbong Jeon, Jung Ick Moon and Hyung Do Choi

9:00 *Wide-Band RCS Measurement for Calibration of the Metallic Sphere for the MIMO Radars*

Naruto Yonemoto, Akiko Kohmura, Shunichi Futatsumori, Kazuyuki Morioka and Yoshio Makita

9:20 *Self-Interference Suppression Method for In-Band Full-Duplex System With Frequency Non-Uniformity*

HongYu Zhu, Chao Wang, Fen Wang, Pengfei Ji, Qingzhan Shi and NaiChang Yuan

9:40 Discussion

Special Session SPS03 - I -: Advances in Reconfigurable Antennas

Room: Lotus 1

Chairs: Nghia Nguyen, Truong Khang Nguyen

8:00 *Dual Polarization Unit-Cell for 1-Bit Ka-Band Beam-Switching Reflectarrays*

Duong Nguyen and Van-Su Tran

8:20 *A High Gain Polarization Reconfigurable MIMO Antenna Array*

Hoang Huy Nguyen, Nguyen Dinh Thai, Nguyen Quoc Dinh and Hung Huy Tran

8:40 *Size Reduction of a Low-Profile Frequency-Reconfigurable Filtering Patch Antenna*
Tianchang Ma, Quoc Hung Dang, Christophe Fumeaux, Shengjian Jammy Chen and Nghia Nguyen

9:00 *Angle-Of-Arrival LoRaWAN Relay Concept Using Channel Activity Detection and Antenna Switching Mechanism*

Manh-Thao Nguyen, Fabien Ferrero, Van Lic Tran and Vo Nguyen Thien Phuc

9:20 *Polarization Reconfigurable Antenna Based on SIW Cavity for mmWave Applications*
Truong Khang Nguyen, Cong Danh Bui, Trung Kien Pham and Tuan-Duc Nguyen

9:40 Discussion

Special Session SPS05 - I -: Advanced MMW & THzW Systems & Applications

Room: Lotus 2

Chairs: Tetsuya Kawanishi, Mai-Khanh N. Nguyen

8:00 *Terahertz Wave Sensing Technology for Visualizing Hidden Objects*

Akinori Taira, Michiya Hayama, Kazuaki Ishioka, Takuma Nishimura, Ichiro Somada and Akihito Hirai

8:20 *Heterogeneous Integration for Sub-THz Antenna Array With InP-Based Power Amplifiers*

Shiro Ozaki, Takuichi Hirano, Naoki Hara, Naoya Okamoto, Yasuhiro Nakasha and Toshihiro Ohki

8:40 *Microwave to THz-Wave Generation Using Ultra-Broadband Photodetector*

Toshimasa Umezawa, Shinya Nakajima, Atsushi Matsumoto, Kouichi Akahane and Naokatsu Yamamoto

9:00 *Impact of Severe Weather Conditions on THz-Wave Power With 300 GHz Radio Units*

Nagasawa Kota, Ogaki Arata, Masataka Sugiyama, Kunihisa Jitsuno and Tetsuya Kawanishi

9:20 *Radio Propagation Emulation Using Radio Over Multi-Mode Fiber Systems*

Atsushi Kanno and Tetsuya Kawanishi

9:40 Discussion

Special Session SPS07 - I -: Integrated Antenna for IoT Applications

Room: Lotus 3

Chairs: Thuy Minh Le, Le Huy Trinh

8:00 *Substrate Selection for Tuning Range Optimization of Frequency-Reconfigurable Antennas*

Quoc Hung Dang, Shengjian Jammy Chen, Christophe Fumeaux and Nghia Nguyen

8:20 *Design of Antennas Using Additive Technology With Surface Metallization*

Fabien Ferrero, Tom Malvaux, Guillaume Calan, Johannes Hoerber, Martin Hedges. and Michael Pfeffer

8:40 *Design of a System-In-Package Module With Integrated Antenna for TinyGS Applications*

Le Huy Trinh, Phan Thanh Tuấn, Diem Ho and Fabien Ferrero

9:00 *Miniature Dual-Band Connected Rain Gauge for Advanced Flood Prediction*

Manh-Thao Nguyen, Fabien Ferrero, Nhan Le Thanh, N. Rich Nguyen, Van Lic Tran and Le Huy Trinh

9:20 Discussion

Thursday, October 10 10:00 - 10:20

Coffee Break

Room: Lotus Ballroom Hall

Thursday, October 10 10:20 - 12:00

Regular Session M01, M15 - II -: Antenna Measurements & Measurement Techniques

Room: Jasmin

10:20 *Long-Term Channel Analysis at 60 and 80 GHz for Autonomous Ground Vehicles*

Radek Zavorka, Tomas Mikulasek, Josef Vychodil, Jiri Blumenstein, Hussein Hammoud, Jarosław Wojtuń, Aniruddha Chandra, Jan M. Kelner, Cezary Ziólkowski and Ales Prokes

10:40 *Distance Measuring Under Water*

Igor Borisovich Shirokov, Elena I. Shirokova and Nikita A. Kosarev

11:00 *Effect of Terrestrial Laser Scanner Tilt on Radio Telescope Surface Measurement Accuracy*

Asif R Rasha, Tim Natusch and Sergei Gulyaev

11:20 *MXene-Based Microwave Absorbers*

See Wee Koh, Li Hong, Philippe Coquet, Christophe Galindo, Lorena Soria Marina, Gaetan Bracciale, Alexis Chevalier, Eric Rius and Vincent Laur

11:40 *Scattering Characteristics of Metamaterial-Based Electromagnetic Scattering Sheet With Protective Layer*

Yasutaka Murakami, Jerdvisanop Chakarothai, Lira Hamada and Katsumi Fujii

Thursday, October 10 10:20 - 10:40

Special Session SPS03 - II -: Advances in Reconfigurable Antennas

Room: Lotus 1

Chairs: Nghia Nguyen, Truong Khang Nguyen

10:20 *Design of Reconfigurable Antenna for All-Metal Wearable IoT Devices*

Le Huy Trinh, Hung Thanh Pham and Thi Khanh Hong Nguyen

Thursday, October 10 10:20 - 12:00

Special Session SPS05 - II -: Advanced MMW & THzW Systems & Applications

Room: Lotus 2

Chairs: Tetsuya Kawanishi, Mai-Khanh N. Nguyen

10:20 *Measurement of 100 GHz Radio Propagation Across Power Transmission Line*

Kensuke Ikeda, Michifumi Miyashita and Shun Morimura

10:40 *Directive Gain of a 4x4 Phased Array Using Printed Yagi-Uda Type Elements*

Takuichi Hirano, Shiro Ozaki and Naoki Hara

11:00 *Wireless Terminal Localization Experiment Using TDOA Method With Radio-Over-Fiber Technique*

Hiroto Terai, Yuki Kuwahara, Yui Otagaki and Hiroshi Murata

11:20 *Outdoor THz Radio Units With Weather and Temperature Sensors for Long-Term Measurement*

Ogaki Arata, Nagasawa Kota, Masataka Sugiyama, Kuniyoshi Jitsuno, Shintaro Hisatake and Tetsuya Kawanishi

11:40 *All-Photonic Fiber-Sub-THz System for 5G NR mmW Signal Transmission and Downconversion*

Tien Dat Pham, Yuya Yamaguchi, Keizo Inagaki, Atsushi Kanno, Tetsuya Kawanishi and Kouichi Akahane

Thursday, October 10 10:20 - 11:20

Special Session SPS07 - II -: Integrated Antenna for IoT Applications

Room: Lotus 3

Chairs: Thuy Minh Le, Le Huy Trinh

10:20 *Dual-Band Wearable Antenna for on Body Communication*

Tam Nguyen Thanh, Thuy Minh Le and Nguyen Quoc Dinh

10:40 *A Defected Ground Structure-Based Triple Bands Antenna for Wearable Applications*

Tam Nguyen Thanh, Thuy Minh Le and Nguyen Quoc Dinh

11:00 *Analyzing Microstrip Antenna Miniaturization Methods for Wearable IoT Sensors*

Lan Thi Tran and Lam Phi

Thursday, October 10 10:40 - 12:00

Special Session SPS02 - I -: Broadband & Reconfigurable Antennas

Room: Lotus 1

Chairs: Duong Nguyen, Trung Kien Pham

10:40 *Folded Transmitarray Antenna Using Low Thickness Transmitarray Unit-Cells*

Duong Nguyen, Nguyen Minh Thien and Linh Mai

11:00 *A Wideband 1-Bit Reconfigurable Intelligent Surface With Polarization Conversion*

Nguyen Minh Tran and Tran Thi Thuy Quynh

11:20 *A Circularly Polarized Reconfigurable Antenna Based on Compact Metasurface*

Nguyen Dinh Thai, Hung Pham-Duy, Hung Huy Tran and Truong Khang Nguyen

11:40 *Tri-Band Shared-Aperture Transmitarray at K-, Ka- and V-Bands*

Trung Kien Pham, Tuyen Pham and Ronan Sauleau

Thursday, October 10 11:20 - 12:00

Special Session SPS25: Innovative MMW Antenna Design & Measurement Techniques

Room: Lotus 3

Chairs: Guan-Long Huang, Wei Lin, Nan Yang

11:20 *On a High-Gain Omnidirectional Polarization-Diversity Dielectric Resonator Antenna*

Qi Zhe Liang, Xiyao Liu, Yu-Xiang Sun and Xiao Sheng Fang

11:40 Discussion

Thursday, October 10 12:00 - 13:00

Lunch

Room: Epice Restaurant

Thursday, October 10 13:00 - 13:50

Special Session SPS02 - II -: Broadband & Reconfigurable Antennas

Room: Lotus 1

Chairs: Duong Nguyen, Trung Kien Pham

13:00 *Wideband Circularly-Polarized Horn in a X-Band Spatially-Fed Array Antenna*

Nhan T Dang, Huy B.D. Nguyen and Trung Kien Pham

13:20 *Resistors and Metamaterial on Double-Slot Antipodal Vivaldi to Enhance Bandwidth and Gain*

Minh-Huy Nguyen, Van-Phan Huynh and Ha Hoang

13:40 Discussion

Thursday, October 10 13:00 - 14:30

Special Session SPS05 - III -: Advanced MMW & THzW Systems & Applications

Room: Lotus 2

Chairs: Tetsuya Kawanishi, Mai-Khanh N. Nguyen

13:00 *Mm-Wave Sensing System Using Integrated CMOS Pulse Transceiver With On-Chip Dipole Antennas*

Mai-Khanh N. Nguyen, Jarred W. Fastier-Wooller, Akio Higo and Tetsuya Kawanishi

13:20 *Self-Heterodyne Measurement of Terahertz Waves by Electro-Optic Detection Using Optical Combs*

Isao Morohashi and Norihiko Sekine

13:40 *Non-Metallic 3D-Printed Packages Based on Dielectric Slot Waveguides*

Nguyen Hoai Ngo and Weijie Gao

14:00 *Radiation Pattern Characterization of a 300 GHz Transceiver Installed Outdoor Using Motorized Pan-Tilt Heads*

Yusuke Tanaka, Shintaro Hisatake, Kota Miyake, Tetsuya Kawanishi, Ogaki Arata, Kunihisa Jitsuno and Masataka Sugiyama

14:20 Discussion

Thursday, October 10 13:00 - 13:40

Special Session SPS23: Antenna & Propagation for Wireless System & Beyond

Room: Lotus 3

Chair: Mohamad Kamal Rahim

13:00 *Phenolic Foam Characterization for Millimeter Wave Luneburg Lens Antenna*

Mohamad Kamal Rahim, Norsaidah Muhamad Nadzir, Mohamed Himdi, Noor Asniza Murad and Osman Bin Ayop

13:20 *UWB MIMO Antenna Design and Analysis at Milimetre Wave Frequencies*

Mohamad Kamal Rahim, Mohamad Aiman Hadi Mohamad Nazer, Noor Asniza Murad, Noor Asmawati Samsuri, Aloysius Adya Pramudita, Bambang Setia Nugroho and Osman Bin Ayop

Thursday, October 10 13:40 - 14:00

Special Session SPS26: Reconfigurable Antennas for 5G mmWave

Room: Lotus 3

Chair: Robert Staraj

13:40 *Dual-Band Dual Polarization Aperture Shared Antennas for MIMO Sub-6 GHz and mmWave Beamforming*

Maymouna Dabbous, Aliou Diallo, Robert Staraj and Philippe Le Thuc

Thursday, October 10 13:50 - 15:00

Special Session SPS15: Antenna Measurement & Optimization for Wireless-Related Features & Applications

Room: Lotus 1

Chairs: Walid El Hajj, Fabien Ferrero

13:50 *Antennas' Phase Difference Measurement Techniques for Wireless Localization Applications Using Angle-Of-Arrival*

Walid El Hajj, Youcef Amara, Nawfal Asrih, Fabien Ferrero and Leonardo Lizzi

14:10 *Advanced EM-Thermal Correlation Technologies for Industrial-Testing of 3D Antenna-In-Package Modules*

Sidina Wane, Edouard de Lédighen, Dustin Kendig, Philippe Laban and Mo Shakouri

14:30 DC-RF Field-Field Correlation Technologies for Unified Detection, Identification and Localization of Moving Objects

Sidina Wane

14:50 Discussion

Thursday, October 10 14:00 - 15:00

Regular Session M01, M15 - III -: Antenna Measurements & Measurement Techniques

Room: Lotus 3

14:00 Performance of Chipless Sensor for Frozen Food Monitoring in Proximity to Meat Products

Cong Danh Bui and Adam Narbudowicz

14:20 Estimation of Harmonic Radiation From K-Band Wireless Power Transmission System

Minoru Furukawa, Toru Osuga, Fumiko Ohori, Satoko Itaya and Takeshi Matsumura

14:40 Discussion

Thursday, October 10 14:30 - 15:00

Special Session SPS16: Transmit & Reflect Array Design & Measurement Methods in the MMW & THz Range

Room: Lotus 2

Chairs: Aurelian Crunteanu, Cyril Decroze

14:30 A 1-Bit Single Layer Transmitarray for Radiation Pattern Reconfiguration at 100 GHz Using Optical Control of Phase Change Materials

Wilfrid Renkanga Mbatchesi, Cyril Decroze, Georges Humbert and Aurelian Crunteanu

14:50 Discussion

Thursday, October 10 15:00 - 15:20

Coffee Break

Room: Lotus Ballroom Hall

Thursday, October 10 15:20 - 17:30

Special Session SPS04: MMW & THz Wave Antennas

Room: Lotus 2

Chair: Kunio Sakakibara

15:20 5G Photonic-Integrated Milli-Meter Wave Pattern Reconfigurable On-Chip Antenna Design

Saeed Haydhah, John Zhang, Azzedine Zerguine, Fabien Ferrero and Tayeb Denidni

15:40 Analyzing Radome and Radar Cover Effects for 77 GHz Automotive Applications

Daehyeon Kim, Youngjun Lee and Wonbin Hong

16:20 Dual-Polarized Wide-Angle Multi-Beam Dielectric Spherical Lens Antenna in 270 GHz Band Fed by Square Horn Primary Radiators

Yoshiki Sugimoto, Takeyuki Tsuchida, Kunio Sakakibara, Takanori Narita and Nobuyoshi Kikuma

16:40 D-Band Transmitarray Antennas for High-Efficient and High-Speed Fixed Wireless Communication

Takashi Tomura, Nobutaka Arai, Keigan MacDonell and Shulabh Gupta

17:00 Lens Shape Equations for Positive and Negative Refractive Index

Yoshihide Yamada, Muhsin Muhsin, Izni Husna Idris, Kamilia Kamardin, Yoshiki Sugimoto and Kunio Sakakibara

16:00 *A Solder-Free Silicon-Based Slot Array Antenna Using Novel Holey-EBG Structures*
Jing Cai, Zhiyong Yang and Miao Zhang

17:20 Discussion

Special Session SPS19: IEEE AP-S SIGHT Antenna Design for Low-Cost, High-Impact Humanitarian Projects

Room: Lotus 2, Lotus 3

Chair: Satish K. Sharma

15:20 *Creating an Impactful and Cost-Effective Flood Prediction Platform*

Shiva Manandhar, N. Rich Nguyen, Thi Anh Thu Nguyen and Fabien Ferrero

15:40 *Gain Enhancement of Wideband Miniaturized Monocone Antenna by Employing Cavity and Dielectric Lens*

Drasti Tandel and Satish K. Sharma

16:00 *Design of Flower Shaped CSRR UWB Antenna With Integrated Bluetooth and Wi-Max Band-Notched Characteristics*

Satish R. Jondhale, Rekha Labade, Ajay K Poddar, Jawad Y Siddiqui and GS Mani

16:20 *Predictive Modeling of Lung Water Content With Machine Learning and RF Sensor*

Prapti Ganguly, Shreyasi Das, Amlan Chakrabarti and Jawad Y Siddiqui

16:40 Panel Discussion

Special Session SPS24: IEC TC 103

Room: Lotus 1

Chairs: Michitaka Ameya, Satoru Kurokawa

15:20 *Standardization Activities in IEC TC103*

Seung-Hyun Cho and Satoru Kurokawa

15:40 *Design and Realization of SIW-Based Feeding Network With Tapered Transmission Lines for Monopulse Antenna*

Achmad Munir, Shita Herfiah, Denny Darlis, Muhammad Farhan Maulana, Agus D. Prasetyo and Zulfi Zulfi

16:00 *Investigation of Multiresonant Wave Absorber Performances in Bandwidth Enhancement*

Budi Syihabuddin, Heroe Wijanto, Mohammad Ridwan Effendi and Achmad Munir

16:20 Panel Discussion

Thursday, October 10 18:00 - 19:00

Performances by Vietnamese artisans and traditional artists

Thursday, October 10 19:00 - 22:00

Gala Dinner

Room: Lotus Ballroom

Friday, October 11

Friday, October 11 8:00 - 10:00

Regular Session A01, A02: Antenna & Antenna Array Design

Room: Jasmin

8:00 *New Circulator-Antenna Concept Based on Ferrite Material*

Inès Benhaddou, Thierry Monediere, Vincent Olivier, Bertrand Lenoir and Laure Huitema

8:20 *Design of Wide-Band Spot Focusing Lens Conical Horn Antenna*

Nan Hu, Shuang Liu, Jianrui Liu, Lixin Zhao and Wenqing Xie

8:40 *Antenna Activation by Surface Currents Generated by a Metasurface in Q-Band*

Chemseddine Benkalfate and Habiba Hafdallah Ouslimani

9:00 *A New Compact Size Dual-Ports Antenna With One Port Stabilized Characteristics During Impedance Variation of the Other*

Chemseddine Benkalfate, Achour Ouslimani and Abed-Elhak Kasbari

9:20 *Non-Invasive Glucose Detection Using Multiple Cell Triangular CSRR Sensor*

Boutheina Tlili, Yaman Benchoubane, Mohamad Alhomsy, Miziya K and Nadeen R Rishani

9:40 Discussion

Special Session SPS13: EM inverse scattering & Imaging: Theory & Applications

Room: Lotus 2

Chairs: Won-Kwang Park, Antonio Cuccaro

8:00 *A T-Matrix Based Plant Stem Model for Inverse Scattering Applications*

Marvin Degen, Benedikt Sievert, Vakhtang Jandieri, Andreas Rennings and Daniel Erni

8:20 *A Combined Iterative Data-Driven Inversion Strategy for Microwave Imaging*

Valentina Schenone, Alessandro Fedeli, Claudio Estatico and Andrea Randazzo

8:40 *Orthogonality Sampling Method for a Fast Object Detection From 2D Fresnel Dataset*

Sangwoo Kang, Seongje Chae, Minyeob Lee and Won-Kwang Park

9:00 *Imaging of Point-Like Scatterers in Multipath Propagation Environment*

Loreto Di Donato, Antonio Cuccaro, Maria Antonia Maisto and Raffaele Solimene

9:20 Discussion

Special Session SPS27 - I -: LP-WAN Applications and Experiments in Da Nang Region

Room: Lotus 1

Chairs: Manh-Thao Nguyen, Van Lic Tran

8:00 *Deployment and Experimental Evaluation of LR-FHSS in Danang City*

Van Lic Tran, Manh-Thao Nguyen, Fabien Ferrero and Dai Huynh Dang

8:20 *Water Meter Digit Recognition Communication in LoRaWAN Network*

Vu Hien Thai and Thai Duyen Ha

8:40 *Synchronous Mechanism for LoRaWAN Relay*

Van Lic Tran, Manh-Thao Nguyen and Fabien Ferrero

9:00 *When 5G Security Meets Natural Language Processing: Challenges and Future Pathways*

Huy-Trung Nguyen, Ngoc-Quan Nguyen, Nguyen Ky Dao and Quoc Bao Trinh

9:20 *Environment Pollution Monitoring System Using LoRaWAN Network*

Van Lic Tran, Van Tien Nguyen, Huu Thang Nguyen, Xuan Ngo Huynh and Fabien Ferrero

9:40 Discussion

Special Sessions SPS08 & SPS21: Low-Latency Satellite Communications & Imagery & Navigation

Room: Lotus 3

Chairs: Minh N. T. Nguyen, Lionel Tombakdjian

8:00 *A Coherent 3-D Model for Satellite-Based VHF Communications*

Van-Su Tran, Huy Nguyen and Minh N. T. Nguyen

8:20 *An EHF Simulation Model for Low-Latency VLEO Satellite Imagery*

Minh N. T. Nguyen and Van-Su Tran

8:40 *Multiple Scattering Analysis Within Swarms of CubeSats Devoted to GNSS Reflectometry*

Laurent Paucof, Jean Cavillot and Christophe Craeye

9:00 *GNSS High Performance Antenna System Using Phased Array Technique*

Lionel Tombakdjian, Fabien Ferrero and Noori BniLam

9:20 Discussion

Friday, October 11 10:00 - 10:20

Coffee Break

Room: Lotus Ballroom Hall

Friday, October 11 10:20 - 12:00

Regular Session A22: Communications

Room: Lotus 3

10:20 *Mid-Range Magnetic Communication System Using Magnetic Induction Sensor-Based Receiver for Conventional and Non-Conventional Media Applications*

Jang-Yeol Kim, Hyun Joon Lee, JungHoon Oh, Kye-Seok Yoon and In-Kui Cho

10:40 *D-Band Electromagnetic Shielding With Optically Transparent Filter for 6G Wireless Communications*

Young-Pyo Hong, Tae-Weon Kang and Sung-Il Chung

11:00 *Continuous Scanning Dielectric Lens Antenna*

Zeineb Khmissi, Cyril Decroze, Hervé Parvery, Cyrille Menudier, Eric Arnaud, Sébastien Reynaud and Arnaud Sackda

11:20 *Underwater Communication With the Use of Loop Magnetic Antennas*

Igor Borisovich Shirokov and Elena Redkina

11:40 *On Statistical Distribution of Far-Field Electric Field for the Diagnosis of Faulty Element*

Yunru Zhao and Qi Wu

Regular Sessions A02, A04: Antenna & Antenna Array Design & Wideband Antennas

Room: Jasmin

10:20 *Design of Left-Hand Circular Polarization Ultra-Wideband (UWB) Horn Antenna*

Nan Hu, Shuang Liu, Jianrui Liu, Lixin Zhao and Wenqing Xie

10:40 *Evaluation of a Ku-Band Wide-Angle Scanning Phased Array With Active Beamforming Circuits*

Huan Nguyen, Julien Lintignat, Cyrille Menudier, Clement Hallepee and Marc Thevenot

11:00 *Uniform Circular Array System for Generating Orbital Angular Momentum Beams*

Farhana Firdous and Ravi Kadlimatti

11:20 *Design and Analysis of 5X1 Series Fed Multiband Microstrip Patch Antenna Array for Wireless Applications*

Priya Kaith, MM Sharma and Ila Sharma

11:40 *Design of Antena for Simultaneous Use of Electromagnetic Induction and NFC for Block Recognition in Education Device*

Boseong Kim and Eun Ho Kim

Friday, October 11 10:20 - 11:20

Special Session SPS01: Microwaves & Artificial Intelligence: A New Paradigm for Improved Diagnostics

Room: Lotus 2

Chair: Sandra Costanzo

10:20 *Dual-Band Stable Resonant Microwave Sensor for Dielectric Characterization*

Antonio Cuccaro, Sandra Costanzo and Raffaele Solimene

10:40 Analytical Approach for the Prediction of Microwave Sensors Radiation Into Biological Media: Preliminary Results

Antonio Cuccaro, Sandra Costanzo and Raffaele Solimene

11:00 Discussion

Friday, October 11 10:20 - 12:00

Special Session SPS27 - II -: LP-WAN Applications and Experiments in Da Nang Region

Room: Lotus 1

Chairs: Manh-Thao Nguyen, Van Lic Tran

10:20 Tourist Geolocation Based on RSSI Using Danang City LoRaWAN Network Infrastructure

Van Lic Tran, Hoang Vo, Van Hoang Long Nguyen, Fabien Ferrero and Huy Quoc Le

11:10 Mitigating Exploitation Attacks on Linux-Based IoT Devices Through System-Call Hooking

Ngoc-Quan Nguyen, Huy-Trung Nguyen, Hong-Son Nguyen and Quoc Bao Trinh

Friday, October 11 12:00 - 13:00

Lunch

Room: Epice Restaurant

Friday, October 11 13:00 - 14:00

Closing Ceremony

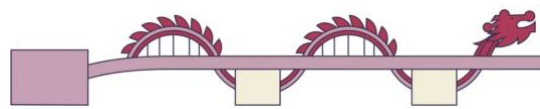
Room: Lotus Ballroom

Chair: Christian Y. Pichot

Friday, October 11 14:00 - 21:00

Half-Day Social Event for All Attendees

Marble Mountain and Hoi An Ancient Town



**2024 IEEE CAMA
DA NANG, VIETNAM**

