

1st IEEE Latin American Conference on Antennas & Propagation



LACAP 2024 CALL FOR PAPERS

December 1-4, 2024
San Andrés Island, Colombia



IMPORTANT DATES

Special Session Proposals: August 20, 2024

Submission deadline: August 31, 2024

Notification: September 30, 2024

THE CONFERENCE

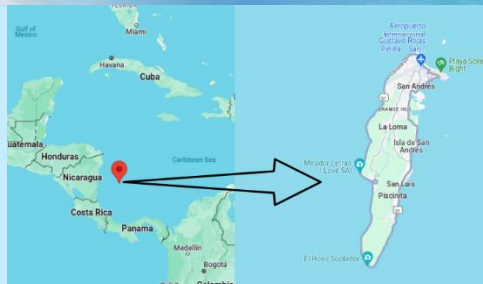
The first IEEE AP-S Latin American Conference on Antennas and Propagation (LACAP) serves several crucial purposes that align with the mission and goals of both IEEE and the broader scientific community.

By convening experts from across Latin America and beyond, LACAP facilitates networking opportunities and encourages interdisciplinary collaboration, leading to the generation of new knowledge and innovative solutions to challenges in antennas and propagation. The first IEEE AP-S Latin American Conference on Antennas and Propagation represents a significant opportunity to promote knowledge exchange, collaboration, education, regional development, and global visibility in the field. By bringing together stakeholders from across Latin America and beyond, LACAP can contribute to advancing the frontiers of antennas and propagation research and technology while addressing the specific needs and aspirations of the Latin American scientific community.



SAN ANDRÉS ISLAND

The island of San Andrés, nestled in the Colombian Caribbean, boasts an enchanting array of delights—nearly forty scuba diving havens, pristine beaches hailed as Caribbean gems, and a sea that transitions through hues of blue, green, and even purple, all embraced by the warmth of its people. Positioned approximately 230 km east of mainland Central America and 750 km north of mainland Colombia, this archipelago earned its UNESCO World Biosphere Reserve status in 2000, known as the "Seaflower Biosphere Reserve". This paradisiacal island magnetizes travelers from across the globe in pursuit of perfect sunsets, ivory beaches, and majestic palm trees swaying in the breeze, harmonized by the carefree smiles of the local islanders, rendering it an unrivaled tropical haven. The cultural mélange reverberates through the islands' music, resonating with rhythms spanning from reggae and reggaeton to soca, calypso, merengue, vallenato, and salsa.



TOPICS

ANTENNAS: Antenna systems and architectures, antenna theory, antenna arrays, mm-wave and sub-mm-wave antennas, multiband, multifunctional and UWB antennas, electrically small antennas, wearable and implantable antennas, lens antennas, reflector, feed systems and components, leaky-wave antennas, dielectric resonator antennas, reconfigurable antennas, active and integrated antennas, MIMO, diversity, smart antennas, RFID antennas/sensors, additive manufacturing for antennas, and other antenna topics.

ELECTROMAGNETICS: EM theory, computational and numerical techniques, optimization methods and machine learning in EM and antenna design, imaging and inverse scattering, scattering, metamaterials, metasurfaces and artificial materials, and other EM topics.

PROPAGATION: Propagation theory, deterministic, empirical and statistical propagation modelling, channel sounding and parameter estimation techniques, experimental methods and campaigns, machine learning for propagation, satellite propagation, propagation for vehicular communications, body and biological tissues propagation, RADAR localization and sensing, and other propagation topics.

MEASUREMENTS: Material characterization and non-destructive testing, near-field, far-field, compact and RCS measurement and calibration techniques, imaging algorithms and measurements, EMI/EMC/PIM instrumentation and measurements, dosimetry, exposure and SAR assessment, mm-wave, THz and quasi-optical antenna measurement, MIMO and OTA testing, and other measurement topics.



INFORMATION FOR AUTHORS

Authors are invited to submit papers in English, online, with a maximum length of TWO PAGES, letter size. Submissions must allow the Technical Program Committee and reviewers to assess the quality of the work in a single acceptance/rejection review process.

For more submission information visit www.lacap2024.org.



ORGANIZING COMMITTEE

General Chair: Javier Araque Quijano, Universidad Nacional de Colombia

Co-Chair: Francisco Pizarro, Pontificia Universidad Católica de Valparaíso, Chile

Finance Chair Camila Albuquerque, CGG, Brazil

Technical Program Committee General Chair: Eva Rajo Iglesias, Universidad Carlos III de Madrid, Spain.

TPC Co-Chairs: Mauricio Rodríguez, Pontificia Universidad Católica de Valparaíso, Chile, and Alexandre Serres, Federal University of Campina Grande, Brazil.

Dissemination and Publication:

Miguel Gutiérrez Gaitán, Pontificia Universidad Católica de Chile, Chile, and Gustavo Siles, Universidad Privada Boliviana



Student travel grants:

Agnese Mazzinghi, University of Florence, Italy.

Local Committee:

Erick Reyes, Instituto Tecnológico Metropolitano, Medellín, Colombia, Carlos Iván Páez, Pontificia Universidad Javeriana, Bogotá, Colombia, Dinael Guevara Ibarra, Universidad Francisco de Paula Santander, Cúcuta, Colombia, and Marlon Patiño Bernal, Universidad Distrital Francisco José de Caldas, Bogotá, Colombia.

Women in Engineering:

Melissa Diago, Universidad Técnica Federico Santa María, Chile, and Francesca Vipiana, Politecnico di Torino, Italy.

International Advisory Committee:

Branislav Notaros, Colorado State University, United States of America.

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KEYNOTE SPEAKERS

We are thrilled to introduce the exceptional lineup of keynote speakers for our conference, featuring highly recognized professionals from academia, industry, and government.



Constantine Balanis, Arizona State Univ., IEEE Life Fellow, Celebrated Author of "Antenna Theory: Analysis and Design" and "Advanced Engineering Electromagnetics"



Yahya Rahmat-Samii, UCLA, US National Academy of Engineering Member, Northrop-Grumman Chair in Electromagnetics, IEEE Life Fellow, IEEE AP-S Past President



Jennifer T. Bernhard, Univ. of Illinois, Donald Biggar Willett Professor, Director of the Illinois Applied Research Institute, IEEE Fellow, IEEE AP-S Past President



Reinaldo A. Valenzuela, Nokia Bell Laboratories, US National Academy of Engineering Member, IEEE Fellow, Director of the Communication Theory Department



Richard W. Ziolkowski, Univ. of Arizona, Fulbright Distinguished Chair of Advanced Science and Technology, IEEE Life Fellow, IEEE AP-S Past President



Susan C. Hagness, Univ. of Wisconsin-Madison, Nat. Academy of Inventors Fellow, Philip D. Reed Prof., ECE Dept. Chair, IEEE Fellow, URSI Isaac Koga Gold Medal



John C. Mather NASA Goddard Space Flight Ctr, Nobel Prize in Physics Laureate, James Webb Space Telescope Lead Scientist, Time Magazine World's 100 Most Influential People

AWPL SPECIAL ISSUE ON LACAP

Selected and extended papers presented at LACAP 2024 will be featured in a Special Issue of IEEE Antennas and Wireless Propagation Letters (AWPL) devoted to LACAP 2024, subject to the evaluation and approval of the Special Issue Proposal by the AWPL Special Issue Committee later this year.

TRAVEL GRANTS

Travel grants will be offered to selected student authors of high-quality papers. Conditions and applications at www.lacap2024.org.

SPECIAL SESSIONS

Requests to organize special sessions for LACAP 2024 should be submitted to Prof. Eva Rajo (eva@tsc.uc3m.es) no later than July 15, 2024. The associated papers will be due on August 15, 2024.

EXHIBITS

LACAP 2024 provides numerous exceptional sponsorship opportunities. Exhibits from industries, academia, government, software, hardware, and



services sectors will be available throughout the conference duration in a high-traffic area of the venue. Interested parties should reach out to Javier Ojeda (rojedas@unal.edu.co).

SOCIAL PROGRAM

Our social program is designed to offer you and your families an unforgettable experience, blending relaxation, adventure, and networking in one of the most beautiful locations on earth.

The social program for LACAP is packed with exciting events designed to enrich your conference experience. Highlights include a welcome cocktail, a social dinner with an awards presentation, and a final networking event featuring visits to the most beautiful spots on the island guided by local experts. Additionally, a wide range of tours and activities will be available daily for participants and their companions, ensuring an engaging and memorable time for everyone. For additional information, contact Javier Ojeda (rojedas@unal.edu.co).

HOTEL DECAMERON ISLEÑO

The venue of the Conference is the Convention Center Decameron "El Isleño." Situated amidst stunning tropical landscapes, it offers guests a luxurious and relaxing escape in the heart of the Caribbean. The hotel boasts the premier convention center in the Island, which was recently renovated, and with the capacity to host up to 1200 guests, including the equipment for meetings, courses, seminars and congresses.



Location: The hotel enjoys a prime location on San Andres Island, known for its pristine beaches, turquoise waters, and vibrant culture. It is ideally

positioned for guests to explore the island's natural beauty and attractions.

Accommodation: Hotel Decameron Isleño boasts comfortable and stylish accommodations, ranging from cozy rooms to spacious suites. Each room is designed with modern amenities and furnished to ensure a pleasant stay for guests.

Facilities: The resort offers a wide range of facilities and services to cater to guests' needs. These may include multiple swimming pools, a fitness center, spa and wellness facilities, water sports activities, tennis courts, restaurants, bars, and entertainment options.



Dining: Guests can indulge in a diverse culinary experience with the hotel's onsite restaurants and bars. From local delicacies to international cuisine, there's something to satisfy every palate. Additionally, themed dining nights and entertainment add to the overall dining experience.

Activities: Hotel Decameron Isleño provides an array of activities for guests to enjoy during their stay. Whether it is snorkeling in the crystal-clear waters, lounging on the beach, exploring the island's attractions, or participating in organized excursions, there is never a shortage of things to do. Hospitality: The hotel is known for its warm hospitality and attentive service. Staff members are devoted to ensuring that guests have a memorable and comfortable stay, providing assistance whenever needed.

