

December 1-4, 2024 - Cartagena de Indias, Colombia

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.



CARTAGENA DE INDIAS

Located on Colombia's Caribbean coast, is a vibrant city known for its rich history, colonial architecture, and cultural charm. Its famous walled city, a UNESCO World Heritage site, features cobblestone streets, colorful buildings, and historic landmarks that reflect its Spanish colonial past. With beautiful beaches, lively nightlife, and a dynamic cultural scene, Cartagena attracts tourists for both relaxation and exploration. The city's blend of history, modernity, and Caribbean atmosphere makes it one of Colombia's top destinations for travelers and event organizers alike.



VENUE - HOTEL ESTELAR CARTAGENA

Modern complex located in the exclusive Bocagrande area, just minutes from the historic walled city and Rafael Núñez International Airport. It features 339 rooms with modern amenities for both relaxation and business, along with services like a business center, gym, pools, spa, and multiple dining options. The 51 Sky Bar, the highest in Colombia, offers stunning 360° views of Cartagena from the rooftop.



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



TRAVEL GRANTS

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

IMPORTANT DATES

Special Session Proposals: Sept 13, 2024

Submission deadline: Sept 30, 2024

Notification: October 20, 2024



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.



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



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



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

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