CALL FOR PAPERS

PIERS – Where Microwave and Lightwave Communities Meet

PIERS: Photonics and Electromagnetics Research Symposium, also known as Progress in Electromagnetics Research Symposium, provides an international forum for reporting progress and recent advances in all aspects of photonics, electromagnetics, and exciting applications. Topics include photonics, plasmonics, metamaterials, antennas, microwave technologies, scattering, remote sensing, quantum electrodynamics, quantum optics, electromagnetic theory, and all modern developments. Potential session organizers are welcome to propose specific technical topics by filling out the PIERS survey at http://piers.org/.

SUGGESTED TOPICS:

1. Electromagnetic theory
2. Computational electromagnetics, hybrid methods
3. Spectra, time, and frequency domain techniques
4. Fast iteration, large scale and parallel computation
5. Transmission lines and waveguide discontinuities
6. Resonators, filters, interconnects, packaging
7. Antenna theory and radiation
8. Phase array, microstrip and printed antennas
9. RF and wireless communication, multipath
10. Power electronics, superconducting devices
11. Systems and components, electromagnetic compatibility
12. Nano scale electromagnetics, MEMS
13. Magnetic levitation, transportation and collision avoidance
14. Precision airport landing systems, GPS
15. Radar sounding of atmosphere, ionospheric propagation
16. Microwave remote sensing and polarimetry, SAR
17. Subsurface imaging and detection technology, GPR
18. Active and passive remote sensing systems
19. Electromagnetic signal processing and machine learning
20. Wireless power transfer and harvesting
21. Remote sensing of the earth, ocean, and atmosphere
22. Rough surface scattering and volume scattering
23. Transmission lines and waveguide discontinuities
24. Scattering, diffraction, and inverse scattering
25. Microwave and millimeter wave circuits and devices, CAD
26. Microwave photonics, THz technology
27. Medical electromagnetics, biological effects, bioimaging
28. Novel optical fibers and fiber-based devices
29. Biophotonics, optical sensors and environmental monitoring
30. Optoelectronic devices and integration
31. Advanced photonic materials and nanoptronics
32. Light emitting and lasing
33. Optical and wireless networking
34. Coherent optics, ultrafast optics
35. Light harvesting, photovoltaics, optoelectronics in energy
36. Metamaterials and plasmonics
37. Quantum electrodynamics, computing and information
38. Plasmas, nonlinear media, fractal, chiral media
39. Biological media, composite and random media
40. Constitutive relations and bianisotropic media
41. Moving media, relativity, field quantization, etc.

SUBCOMMITTEES FOR PIERS 2019 IN ROME

The following five subcommittees have been formed for PIERS 2019 in Rome (however, the topics of PIERS 2019 Rome are not limited to these areas):

SC 1. Computational Electromagnetics, Electromagnetic Compatibility, Scattering and Electromagnetic Theory
SC 2. Metamaterials, Plasmonics and Complex Media
SC 3. Optics and Photonics
SC 4. Antennas and Microwave Technologies
SC 5. Remote Sensing, Inverse Problems, Imaging, Radar and Sensing

FOCUS SESSIONS

In PIERS 2019 Rome, a dozen of Focus Sessions will be planned. Each focus session should be focused on a specific hot topic that must be timely and reflect the future trends or the latest scientific advances in the area. The leadership of the conference will select the topics of focus sessions and the responsible organizers. The organizers may adjust the title of the focus session to make it e.g. more specific/focused and should make the best effort to ensure the high quality of the session by inviting high-profile keynote speakers (30 min for each; 0-2 keynote speakers for each focus session) and excellent invited speakers (20 min for each), etc. Some contributed oral talks (15 min each) are encouraged, however, quality must be very well controlled by the organizers with a typical acceptance ratio of less than 50%. Each focus session will last for a half-day (with a coffee break) or a full-day (with a lunch break and two coffee breaks).
YOUNG SCIENTIST PROGRAMS

To encourage more young scientists and students to take part in PIERS with presentations of good research results, two young scientist programs are organized at PIERS 2019 in Rome.

**Best Student Paper Award (BSPA):** Any full-time university student, who is the first author as well as the presenting author with a full paper of 5–10 pages submitted for oral presentation, can apply for the Best Student Paper Award (BSPA). Three Prize Winners (First, Second, and Third Prizes) and two Honorable Mentions will be selected for each track (SC1 to SC5).

**Young Scientist Award (YSA):** To qualify applications for the YSA, the applicant must have PhD degree in science/engineering and under 40 years of age by the conference date. The applicant must be listed as the first author as well as the presenting author with a full paper of 5–10 pages submitted for oral presentation. A curriculum vitae with publication list must be submitted together with the abstract and full paper. The full-length papers of both awards should be submitted by the full-length paper submission deadline and registered by the pre-registration deadline. Awardees will be selected after peer-review of the applications by the PIERS Young Scientist Program Committee of PIERS 2019 Rome.

PAPER SUBMISSION MUST BE RECEIVED BY 15 JANUARY 2019

**Abstract Guidelines:** Authors are invited to submit a one-page abstract. The abstract limit is one page but must have at least 250 words in English. No full-length paper is required. The abstract should explain clearly the content and relevance of the proposed technical contribution. On a separate page list the following information: (1) Title of the paper, (2) Name, affiliation, and email of each author, (3) Corresponding author and Presenting author, (4) Topic or Session Organizer, if applicable, (5) State if poster presentation is preferred. Your co-authors will be informed about the paper submission. Paper may not be displayed in the PIERS Publications until the emails of all the co-authors are submitted.

Please use On-Line-Submission ([http://piers.org](http://piers.org)) to submit your contribution. In the case of online submission failure, you may email ([office@piers.org](mailto:office@piers.org)) your contribution by attachments. Authors are recommended to use *.tex, *.doc, or *.pdf as the file format. The abstract submission deadline is 15 January 2019 and the author pre-registration deadline is 15 March 2019.

**Full Papers - PIERS Proceedings for IEEE Xplore:** Author of an accepted abstract is invited (but is not required) to submit a full paper of 3–10 pages. Full papers will be reviewed by reviewers including the session organizers. Only accepted and registered papers will be included in the final PIERS Proceedings, which may be published and archived in IEEE Xplore after the actual conference. Feedback from the physical conference presentation may affect the final decision. For registered and paid abstract, there is no additional publication charge for full-length papers within 8 pages. The overlength page charge will be USD 50 per page. Please visit PIERS website for the latest PIERS sample files. The deadline for the submission of full papers is 20 March 2019.

**PIERS No-Show Policy:** Please be reminded that if your paper is a no-show onsite, its full-length paper will not be included in the final PIERS proceedings.

PRESENTING AUTHORS MUST PRE-REGISTER BY 15 MARCH 2019

Each presenting author is limited to presenting no more than three papers in oral and poster sessions, and must pre-register by paying a non-refundable fee of US$650 before 15 March 2019. For students with valid identification, the non-refundable pre-registration fee is US$370. Registration fee will be raised to $760 and $470 for students after 15 March 2019. Only pre-registered articles will be scheduled in the final Technical Program. Inclusion of the article in the Technical Program and PIERS Proceedings is guaranteed only after the registration of the presenting author is completed. Registration fee includes admission to all technical sessions, break areas, and an e-copy of the PIERS abstracts. PIERS Proceedings will not be available onsite and will be published on IEEE Xplore after the conference. There is no mail service of conference materials for no-show PIERS participants.

Updated and detail information will be posted at [http://piers.org](http://piers.org) and [http://emacademy.org](http://emacademy.org)