



## 2021 IEEE Radar Conference (RadarConf21) **Welcome from the Chairs**

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## Welcome from the Chairs

Welcome to the virtual 2021 IEEE Radar Conference hosted by the IEEE Atlanta Section and the IEEE Aerospace and Electronic Systems Society (AESS). This conference promises an engaging program through lectures chosen from hundreds of submissions, plenary talks, the radar summer school, a diverse set of tutorials, an exciting radar challenge, a Women in Engineering (WiE) discussion on “Being the First”, and a new government and industry panel session! In addition, there will be opportunities to learn more about the IEEE Young Professionals, schedule appointments with exhibitors, and network in this virtual environment. The rich technical program, themed under Radar on the Move, includes topics in radar techniques, multisensor exploitation, applications and phenomenology, systems and subsystems, as well as a series of special sessions.

Enjoy your time at this virtual conference, and we will do our best to make it enjoyable and technically rewarding.

*Kristin Bing*

**Conference Chair**

Kristin Bing

Georgia Tech Research Institute

*Theresa Brunasso*

**Conference Vice Chair**

Theresa Brunasso

D&S Microwave

## Welcome from the Technical Program Co-Chairs

Dear Attendees,

It is our great pleasure to welcome you to the 2021 IEEE Radar Conference. The conference was originally proposed to be held in person in Atlanta, Georgia, USA. However, the world in which we live has changed significantly since the original proposal and the conference is being held virtually. The organizing committee has strived to structure the virtual conference so that attendees have an experience similar to that of an in person conference.

Building a technical program of this year's virtual conference that closely represents that of an in person conference has been a challenge. The technical program committee was constructed of subject matter experts (SMEs) in the various aspects of radar systems from throughout the world. The technical areas of interest in radar were organized into 23 tracks and two or three SMEs were assigned to manage the review of papers in their track. An average of 4.3 reviews were obtained for each paper. The conference received 269 submissions and 203 papers were accepted for publication for an acceptance rate of 75%. The distinction between poster and regular papers was dropped due to the virtual format and all accepted papers are considered regular papers. Those papers were organized into 40 sessions in four presentation tracks.

In order to improve the overall quality of papers in the conference and ensure that papers in areas considered critical by the technical committee were part of the program, Laura Anitori (TNO), Luke Rosenberg (Defense Science & Technology Group, Australia), and Graeme Smith (JHU Applied Physics Laboratory) were appointed as Special Session Chairs to identify the critical areas and invited organizers for special session in those areas. A total of 12 special sessions were organized and are part of the technical program. Those special sessions cover both consolidated and emerging areas and were built to offer quite diverse points of view from industrial, research, and even historical aspects. We believe that this approach to special sessions has made a much better conference. The technical program is the result of many hours of hard work by the Technical Program Committee, and we can proudly state that the impressive technical program accounts for key issues of radar theory/practice and embraces many of the challenging aspects of radar systems for civilian, defense, and homeland security applications.

The contributors to the 2021 IEEE Radar Conference come from academia, government, industry, and research facilities, 29 countries, and 5 major regions. Track chairs, peer reviewers, and session chairs were selected from throughout the world. Thus, 2021 IEEE Radar Conference is truly an international event.

The conference program also incorporates a two-day Radar Summer School covering diverse and fundamental topics central to the field of Radar and providing a good warm-up to the more advanced Radar Tutorials being held during the 2021 IEEE Radar Conference. The Tutorial program includes 17 talks by recognized radar experts and provides attendees with the opportunity to take a deeper dive into topics most interesting to our community. These virtual classes connect attendees and instructors for in-depth learning, with demonstrations and/or hands-on materials. Last but not least, four plenary talks by well-known and distinguished speakers are planned to kick-off the technical program.

As in the past years, the 2021 IEEE Radar Conference hosts a student paper competition with

awards to recognize the best student papers. In addition, the conference features the organization of the Radar Challenge, a series of events that enables participants to experience the magic of radar in a personal, tangible and experiential way. In keeping the theme of recognition of younger radar engineers, a Celebration of Life Tribute to Mike Wicks will be part of the conference. Mike has been a mentor and benefactor to numerous members of the radar community. Mike died in December 2020 and one of his final acts as a benefactor to the radar community was a grant for students for travel to all future radar conferences.

The organizers feel deeply indebted to all the authors, presenters, reviewers, invited speakers, exhibitors, and sponsors without whom this event could not have been possible. We are delighted to wish all of you a very fruitful virtual conference and look forward to stimulating productive interactions amongst the speakers, exhibitors, colleagues, and the broader virtual audience. After all, radar is on the move and we cannot stop it!!!!

With our warmest regards,

W. Dale Blair and Fabiola Colone

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