

# 15<sup>th</sup> European Conference on Antennas and Propagation

## Call for Papers

Düsseldorf, Germany

March 22–26, 2021

### THE CONFERENCE

EuCAP is Europe's largest and most significant antennas and propagation conference attracting more than 1400 participants from academia and industry, and more than 50 industrial exhibitors, from all over the world. It is a great forum for exchange of new technical-scientific achievements, for demonstrating state-of-the-art technology, and for establishing and strengthening professional networks.

The 2021 host country Germany has a strong antennas and propagation community both in academia and industry. Moreover, antennas and propagation play a central role in the current transition of Germany's strong automotive industry towards digitally connected cars and autonomous driving. Finally, many cellular operators and telecommunications equipment vendors have large branches and even headquarters in the host city Düsseldorf and the Rhine-Ruhr-Area, leading the development of 5G. Therefore, EuCAP 2021 will be a unique place to strengthen the link between the scientific antennas and propagation community and the automotive as well as the 5G industry.

### FORMAT OF THE CONFERENCE

The conference will comprise:

- Plenary sessions with invited and keynote speakers
- Oral sessions (both convened and regular)
- Poster sessions
- Short courses
- Industrial and scientific workshops
- Industrial exhibition

### APPLICATION TRACKS

Aiming at increasing the interaction between academia and industry, the conference will feature session tracks focused on front-line applications; see reverse side.

### BEST PAPER AWARDS

For EuCAP 2021 there will be a Best Student Paper Award and Best Paper Awards in the four categories Antennas, Electromagnetics, Propagation, and Measurement.

### GRANTS

A limited number of grants covering both travel and registration will be offered to selected authors of high-quality papers. More information will be published at [www.eucap2021.org](http://www.eucap2021.org).

### IMPACT OF COVID-19

The EuCAP Conference Organising Committee, the EuCAP Steering Committee and EurAAP will carefully monitor the worldwide development of COVID-19 and are taking already all the necessary steps enabling virtual presentations and other online elements for those who may not attend EuCAP 2021 physically due to travel restrictions.

### AMTA EUROPE

The Antenna Measurement Techniques Association (AMTA) is strongly involved in the conference. AMTA will contribute with invited speakers, provide special sessions, cooperate in the application tracks, and sponsor the technical tours.

### IET AND EuMA

Authors can apply for publication in a special issue of either Microwaves, Antennas & Propagation (IET) or International Journal of Microwave and Wireless Technologies (EuMA) during the submission process. Please see the conference home page for more information.

### EXHIBITION AND SPONSORSHIP

The conference will provide numerous opportunities for exhibitors and sponsors, according to their strategic visibility and publicity targets. Coffee breaks and lunches will be served in the exhibition area, in order to increase the interaction between participants and exhibitors. Please see the conference homepage for more information.

### DÜSSELDORF

Düsseldorf is a vibrant city with a cosmopolitan way of life and a high living standard. It is also an important venue for conferences and trade fairs, with the corresponding infrastructure such as a modern conference centre, with a large exhibition area, efficient public transport, a large choice of hotel rooms and great variety of restaurants. Düsseldorf is well connected to the European railway network and offers direct flight connections worldwide. With its lively districts, its Rhine Promenade, and the beautiful Old Town known as the "longest bar in the world", with 260 restaurants and pubs concentrated within 1km<sup>2</sup>, Düsseldorf's open and welcoming character makes it the perfect place for EuCAP 2021.

### INFORMATION FOR AUTHORS

Authors are invited to submit papers online with a minimum length of two and a maximum length of five A4 pages. The paper must contain enough information for the Technical Programme Committee and reviewers to assess the quality of the work in a single acceptance/rejection review process. It will be possible to revise accepted papers in line with the reviewers' comments.

Submit your paper online at [www.eucap2021.org](http://www.eucap2021.org) no later than 16 October 2020. The submission requires an EDAS<sup>®</sup> account, which is free. Presented papers will be proposed for inclusion in IEEE Xplore, if the authors choose this option during the submission process. Compliance to the IEEE format is mandatory in this case.

At least one of the authors of each paper must register as delegate for attending the conference. A delegate cannot register more than two papers in his/her name as "presenting author".

### FIRM DEADLINE

Please recall the EurAAP policy for EuCAP: there will be no extension of the paper submission deadline; late or updated submissions will not be accommodated after the deadline.



### IMPORTANT DATES

Deadline 16 October 2020

Notification 22 December 2020

Revised paper 5 February 2021

[www.eucap2021.org](http://www.eucap2021.org)

## Conference Topics and Application Tracks

### Antenna Topics

<b>A01</b>	Antenna theory
<b>A02</b>	Antenna interactions and coupling
<b>A03</b>	Sub mm-wave, THz and nano-optical antennas
<b>A04</b>	Mm-wave antennas
<b>A05</b>	Machine learning for antennas
<b>A06</b>	Conformal antennas
<b>A07</b>	Dielectric resonator antennas
<b>A08</b>	Electrically small antennas
<b>A09</b>	Lens antennas
<b>A10</b>	Slotted-waveguide and leaky-wave antennas
<b>A11</b>	Multiband and wideband antennas
<b>A12</b>	Wearable and implantable antennas
<b>A13</b>	Adaptive and reconfigurable antennas
<b>A14</b>	Active and integrated antennas
<b>A15</b>	RFID antennas/sensors and systems
<b>A16</b>	UWB antennas and time-domain techniques
<b>A17</b>	Array antennas
<b>A18</b>	Reflector, feed systems, and components
<b>A19</b>	Reflect arrays and transmit arrays
<b>A20</b>	Antennas for wireless power transmission and harvesting
<b>A21</b>	Additive manufacturing
<b>A22</b>	MIMO, diversity, smart antennas & signal processing
<b>A23</b>	Antenna systems and architectures
<b>A24</b>	Other antenna topics

### Electromagnetics Topics

<b>E01</b>	EM theory
<b>E02</b>	Analytical techniques
<b>E03</b>	Computational and numerical techniques
<b>E04</b>	Optimisation methods and machine learning in EM
<b>E05</b>	Imaging and inverse scattering
<b>E06</b>	Scattering and diffraction
<b>E07</b>	Frequency and polarization selective surfaces (incl radomes)
<b>E08</b>	Metamaterials, metasurfaces and EBG
<b>E09</b>	Nano-electromagnetics
<b>E10</b>	EM education
<b>E11</b>	Other EM topics

### Measurements Topics

<b>M01</b>	Material characterisation and non-destructive testing
<b>M02</b>	Radar scattering measurement and calibration techniques
<b>M03</b>	Near-field, far-field, compact and RCS range measurement techniques
<b>M04</b>	Data acquisition, imaging algorithms and processing methods
<b>M05</b>	EMI/EMC/PIM chambers, instrumentation, and measurements
<b>M06</b>	Dosimetry, exposure, and SAR assessment
<b>M07</b>	Satellite and aerospace antenna characterisation
<b>M08</b>	Mm-wave, THz, and quasi-optical antenna measurements
<b>M09</b>	MIMO and OTA testing
<b>M10</b>	General antenna measurements and other topics

### Propagation Topics

<b>P01</b>	Propagation theory and deterministic propagation modelling
<b>P02</b>	Empirical and statistical propagation modelling
<b>P03</b>	Channel sounding and parameter estimation techniques
<b>P04</b>	Propagation experimental methods and campaigns
<b>P05</b>	Mm-wave and UWB propagation
<b>P06</b>	Indoor and Urban propagation
<b>P07</b>	Machine learning for propagation
<b>P08</b>	Satellite propagation
<b>P09</b>	Propagation for vehicular communications
<b>P10</b>	Propagation in biological tissues
<b>P11</b>	Body-area propagation
<b>P12</b>	Radar, localisation, and sensing
<b>P13</b>	Radio science and remote sensing
<b>P14</b>	Other propagation topics

### Application Tracks

<b>T01</b>	LTE and Sub-6GHz 5G
<b>T02</b>	Millimetre wave 5G
<b>T03</b>	Wireless LANs
<b>T04</b>	IoT and M2M
<b>T05</b>	Biomedical and health
<b>T06</b>	Aircraft (incl. UAV, UAS, RPAS) and automotive
<b>T07</b>	Defence and security
<b>T08</b>	Positioning, localization & tracking
<b>T09</b>	Space (incl. cubesat)
<b>T10</b>	EM modelling and simulation tools
<b>T11</b>	Fundamental research and emerging technologies

[www.eucap2021.org](http://www.eucap2021.org)

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