



INTERNATIONAL CONFERENCE ON RADAR
Brisbane Convention & Exhibition Centre
27th – 30th August 2018

RADAR2018

NEW FRONTIERS IN RADAR

The International Conference on Radar 2018 Technical Program Committee invites the submission of papers of original work for consideration as an Oral or Poster Presentation for the Conference.

PAPER SUBMISSION KEY DATES

Call for papers	Monday, 23 October 2017
Call for Papers Close	Friday, 16 February 2018
Acceptance Notification	Wednesday, 18 April 2018
Author Registration Deadline	Wednesday, 2 May 2018
Program uploaded to website	Wednesday, 16 May 2018

INSTRUCTIONS FOR PREPARING AND FORMATING YOUR PAPER

- Papers must be submitted in PDF.
- Papers must be submitted in English. Your Papers must be print ready.
- Minimum number of 4 (four) pages with a maximum number of 6 (six) pages.
- Use standard abbreviations only. Within the body of the Paper, when using abbreviations spell out the name in full at first mention and follow with the abbreviation in parenthesis. Abbreviations may be used in the title, provided the name in full is outlined in the body of the Paper.
- It is the responsibility of the submitting author to ensure that the submission has been approved by all authors.
- The Technical Program Committee will not be responsible for any errors published.

PAPER TEMPLATES

MS Word Templates:

- [MS Word Template file \(A4 page size\)](#)

LaTeX Templates:

- Description of the LaTeX [Archive Contents](#)
- [Unix LaTeX template files](#)
- [Windows LaTeX template files](#)
- Use the template's conference mode. See template documentation for details.
- Eliminate Type 3 font usage whenever possible. Refer to the [Type 3 Font Info](#) page for details.

INSTRUCTIONS FOR SUBMITTING YOUR PAPER

1. **Click here** to commence your Paper submission through eOrganiser. Papers must be submitted by a presenting author and will only be accepted via eOrganiser in the above format.
2. Click the pink '**Create an Author Account**' button on the bottom right hand side.
3. After completing your author account details, you will be sent an email to verify your account for login. Please record your account password in case you need to access it again to make any changes to your submission prior to lodgement.

4. Once logged in, click the pink '**Submit**' button to access the submission page.
5. Indicate your preferred **presentation type**:
 - a. Oral
 - b. Poster
6. Enter your paper title in the '**Paper Title**' section.
7. Upload your Paper in a PDF format, following the format used in the Paper submission template.
8. Add any additional emails to the email correspondence box (any email addresses entered here will be included in the correspondence emails that are sent to you)
9. Ensure you indicate the presenting author(s) for the Paper.
10. Select one of the themes from the list provided:

Radar Systems

- Automotive radar
- Ground to air surveillance
- Surveillance of space radar
- Naval and maritime surveillance
- Airborne surveillance
- Coastal surveillance
- Fire control radar
- Over-the-horizon radar
- Passive radar (coherent)
- Space radar
- Air-traffic control
- Distributed and multi-static radar
- Meteorological radar
- Ballistic and cruise missile defence radar
- Secondary radar
- Multifunction, active / passive RF-EW systems
- Common aperture systems
- LPI radar
- Networks of sensors
- Multiplatform / multisite systems
- ECM / ECCM
- Counter-stealth
- History of radar and radar techniques

Remote Sensing

- SAR modes for 2D and interferometric SAR
- Distributed / bistatic or multistatic systems
- Innovative SAR concepts
- Maritime Situational Awareness (MSA)
- Oceanographic radar

Target Imaging and Aided Target Recognition

- Multi-channel multi-static ISAR
- Radar tomography

- High-resolution narrowband radar imaging
- Compressive sensing based target imaging
- Auto-focusing techniques
- Distributed MIMO radar imaging
- Passive radar imaging
- Advanced target classification techniques
- Sensor fusion for target identification
- Emerging Radar Applications
- Indoor radar
- Gesture detection and tracking
- Sensors for autonomous systems
- Autonomous automobiles
- Radar and drones
- Mine detection
- Environment monitoring
- Pollution detection
- Docking aids
- Surveillance of runways / detection of debris
- Sense and avoid
- Monitoring in the home

Emerging Technologies

- Time and frequency sources and distribution
- Synchronisation
- Quantum radar
- Passive detection and location
- Millimetre radar / radiometry
- Multi-band radar
- Ultra-wide band radar
- Laser radar
- Machine learning for radar
- Novel human machine interface
- High-power solid state
- RF photonics
- Superconducting oscillators and filters
- MEMS for radar applications

- Conformal, non-standard antennas
- Bio-inspired radars
- Health monitoring radars
- Radar entomology

- Integrated modular avionics
- Reconfigurable processing architectures
- Benefits of civilian technologies (COTS)

Waveform Design, Beamforming and Signal and Data Processing

- Waveform design
- Multi-input multi-output waveforms and systems
- Adaptive waveforms
- Adaptive beamforming
- Knowledge aided adaptive processing
- Multi-frequency systems
- Multi-polarisation techniques
- Clutter rejection
- Jamming rejection
- Detection
- CFAR
- Tracking (after / before detection)
- Waveform diversity

Advanced Sub-systems and Technologies

- Time and frequency reference systems
- Direct-sampling clock distribution
- New antenna concepts
- Wideband antennas and radomes
- Antenna calibration
- Frequency / angular selective structures
- RF filtering
- Future T/R modules
- High-speed analogue to digital converters
- RF modular architectures

Radar Management Techniques

- Cognitive radar
- Radar beam scheduling and planning
- Multifunction radar / waveform management
- Data fusion
- Resource allocation
- Compliance with regulations
- Spectrum out-of-band emission control
- Multi-criteria optimisation
- Networks of sensors (that include radar)

Modelling and Simulation

- Performance prediction
- Virtual prototyping
- Environment modelling
- Performance evaluation
- System modelling

Radar Environment and Phenomenology

- Propagation
- Foliage penetration
- Ionospheric propagation
- Target and clutter signatures
- Low observable design
- Micro-Doppler signatures and techniques

11. Click '**Preview and Submit**'. You will be able to preview your Paper in PDF and make any changes if required.
12. While on the preview window, click '**Submit**' to confirm your Paper submission. If you do not immediately receive a confirmation email that your Paper was successfully submitted, please contact the Conference Managers via email: radar2018@arinex.com.au.

GENERAL POLICIES AND REQUIREMENTS

- All Papers must contain original work of the presenting author(s).
- The presenting author must submit the Paper.
- Papers must be submitted to the Conference Managers via eOrganiser by **Friday, 16 February 2018**.
- Papers will not be accepted via fax, email, mail or USB/CD.
- All fields on the online Paper submission form must be completed.
- Acceptance of papers for presentation at the Conference will be based on committee selection.

- All presenting authors will be required to register and pay for the Conference by the author registration deadline of **Wednesday, 2 May 2018** to ensure that their Paper(s) are included in the final program.
- It is the responsibility of the presenting author to ensure that the Paper is submitted correctly.
- After an author has submitted their Paper, they must check their submission to ensure the document has been uploaded correctly. Authors are able to check their submission by clicking on the viewing option in the submission form.
- The Conference Managers will not be held responsible for Paper submissions not received via the website or for submission errors caused by Internet services outages or other unforeseen events.

ASSESSMENT CRITERIA

Each Paper will be assessed according to the following criteria:

1. Relevance to a Conference theme(s).
2. Relevance to the professional context of delegates.
3. Potential to contribute to the body of knowledge.

NOTIFICATION OF ACCEPTANCE

Notification of acceptance will be sent via email to the submitting author by **Wednesday, 18 April 2018**. Acceptance or otherwise is at the discretion of the Technical Program Committee whose decision is final. All presenting authors must register and pay to attend the Conference.