

2014 International Workshop on Antenna Technology: Small Antennas, Novel EM Structures and Materials, and Applications

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Program

Registration Open

Opening Ceremony

Keynotes

Smart Antennas for Safeguarding Australia

Alexander Zelinsky (Chief Defence Scientist & Director DSTO, Australia)

Recent Research on Antennas for Wireless in Australia

Trevor S. Bird (Antengenuity & CSIRO, Australia)

Metamaterial Antennas: From Physics To Designs

Zhi Ning Chen (National University of Singapore & Institute for Infocomm Research, Singapore)

Coffee Break

Invited 1: Dual Polarized and Small Antennas

Non-Foster Augmentations of Electrically Small Antennas: Practical Design Considerations and Results

Richard W. Ziolkowski (University of Arizona, USA)
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Applications of Circularly Polarized Crossed Dipole Antennas

Ikmo Park (Ajou University, Korea), Son Xuat Ta (Ajou University, Korea), Jea Jin Han (Ajou University, Korea) and Richard W. Ziolkowski (University of Arizona, USA)
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Design of Base-Station Antennas with Stable Radiation Patterns

Qing-Xin Chu (South China University of Technology, P.R. China), Yu Luo (South China University of Technology, P.R. China) and Ding-Liang Wen (South China University of Technology, P.R. China)
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Low Profile Dual-Polarized Antenna Array for Operation at the K Band

Przemyslaw Gorski (Wroclaw University of Technology, Poland), Arkadiusz Byndas (Wroclaw University of Technology, Poland), Pawel Kabacik (Wroclaw University of Technology, Poland) and Mariusz Hofman (Wroclaw University of Technology, Poland)
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A Spectrally Efficient Chipless RFID Tag Based on Split-wheel Resonator

Md. Shakil Bhuiyan (Monash University, Australia) and Nemaï Karmakar (MONASH University, Australia)
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Interactive 1.1: Wearable Antennas/BAN

A Printed Dual Band Antenna with a Ground Plane and Electromagnetically-Coupled Feed for Wireless Body Area Networks

Syed Muzahir Abbas (Macquarie University, Australia), Yogesh Ranga (CSIRO, ICT Centre, Australia) and Karu Esselle (Macquarie University, Australia)
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Shorting Strategies for a Wearable L-Slot Planar Inverted-F Antenna

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Movement based time division multiplexing for near real time feedback body area network applications

Haider Sabti (Griffith University, Australia) and David V Thiel (Griffith University, Australia)
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Dual mode Switch parasitic antenna for On/Off body communication channels

Mohammad Vatankhah Varnoosfaderani (Griffith University & Center for Wireless Monitoring and Application, Griffith University, Australia), David V Thiel (Griffith University, Australia), Junwei Lu (Griffith University, Australia) and Manimaran Kanesan (Griffith University, Australia)
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Design of a All-fabric Higher Order Mode Circular Patch Antenna for Wireless Body Area Network Application

Jinpil Tak (Hanyang University, Korea) and Jaehoon Choi (Hanyang University, Korea)
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Wideband Body-Centric Channels Depending on Bandwidths in Various Environments

Miyuki Hirose (Tokyo Denki University, Japan) and Takehiko Kobayashi (Tokyo Denki University, Japan)
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Woo Cheol Choi (Yonsei University, Korea), Ki Joon Kim (Yonsei University, Korea), Young Joong Yoon (Yonsei University, Korea) and Jeung Uk Ha (LG Electronics, Korea)
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Yoshihiko Kuwahara (Shizuoka University, Japan), Shunsuke Sudo (Shizuoka University, Japan) and Hiroyuki Kamo (Honda Elesys Co., Ltd, Japan)
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Heiko Gulan (Karlsruhe Institute of Technology, Germany), Sören Marahrens (Karlsruhe Institute of Technology, Germany), Christian Rusch (Karlsruhe Institute of Technology, Germany), Benjamin Goettel (Karlsruhe Institute of Technology, Germany) and Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
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Miniaturized Integrated Butler Matrix for 180 GHz Chip-to-Chip Communication

Michael Jenning (Dresden University of Technology, Germany) and Dirk Plettemeier (Dresden University of Technology, Germany)
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Design and Measurement of W-band Offset Stepped Parabolic Reflector Antennas for Airport Surface Foreign Object Debris Detection Radar Systems

Shunichi Futatsumori (Electronic Navigation Research Institute, Japan), Kazuyuki Morioka (Electronic Navigation Research Institute, Japan), Akiko Kohmura (Electronic Navigation Research Institute, Japan) and Naruto Yonemoto (Electronic Navigation Research Institute, Japan)
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Yi Yang (The University of New South Wales, Australia), Eric Chan (CSIRO, Australia) and Rodica Ramer (University of New South Wales, Australia)
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Ali K. Horestani (The University of Adelaide, Australia), Withawat Withayachumnankul (The University of Adelaide, Australia), Abdallah Chahadih (Lille University, France), Abbas Ghaddar (Lille University, Australia), Mokhtar Zehar (Lille University, France), Derek Abbott (University of Adelaide, Australia), Tahsin Akalin (Université de Lille 1, France) and Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia)
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Aykut Cihangir (University of Nice Sophia Antipolis, France), Fabien Ferrero (CREMANT, Université Nice-Sophia Antipolis & CREMANT CNRS, France), Cyril Luxey (University Nice Sophia-Antipolis, France), Gilles Jacquemod (University of Nice, France), Alexandre Reinhardt (CEA-LETI, France), Laurent Dussopt (CEA, LETI, Minatec, France), Nicolas Lorphelin (DELFMEMS, France), Christophe Pavageau (DELFMEMS, France) and Patrice Brachat (Orange Labs & France Telecom, France)
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A Polarization Reconfigurable Antenna for Dual-Band Operation

Peiyuan Qin (CSIRO Computational Informatics, Australia), Y Jay Guo (CSIRO, Australia) and Can Ding (CSIRO Computational Informatics & Xidian University, Australia)
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Ruchi Chaturvedi (LNMIIT, Jaipur, India) and Raghuvir Tomar (LNMIIT, Jaipur, India)
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Compact Pattern Reconfigurable LTE Antenna

Jerzy Kowalewski (Karlsruhe Institute of Technology, Germany), Tobias Mahler (Karlsruhe Institute of Technology (KIT), Germany), Christoph Heine (Karlsruhe Institute of Technology, Germany) and Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
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Beam Scannable Microstrip Patch Antenna

Farooq Sultan (King Fahd University of Petroleum and Minerals, Saudi Arabia) and Sharif Iqbal Miru Sheikh (King Fahd University of Petroleum & Minerals (KFUPM), Saudi Arabia)
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Correlation Coefficient Control For A Frequency Reconfigurable Dual-Band Compact MIMO Antenna Destined For LTE

Alexandru Tatomirescu (Aalborg University, Denmark), Emil Buskgaard (Aalborg University, Denmark) and Gert Pedersen (Aalborg University, Denmark)
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Shen Wang (Yokohama National University, Japan) and Hiroyuki Arai (Yokohama National University, Japan)
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Yu-Jen Chi (National Chiao Tung University, Taiwan) and Fu-Chiang Chen (National Chiao Tung University, Taiwan)
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Analysis of Sparsely Sampled Phased Array Antenna for Advanced Doppler Radar

Farah Nadia Mohd Isa (International Islamic University Malaysia, Malaysia) and Paul Brennan (University College London, United Kingdom)
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A Compact Phase Shift Unit for Analogue Beamforming

Can Ding (CSIRO Computational Informatics & Xidian University, Australia), Y Jay Guo (CSIRO, Australia), Peiyuan Qin (CSIRO Computational Informatics, Australia), Luyang Ji (Xidian University & CSIRO Computational Informatics, Australia) and Yintang Yang (Xidian University, P.R. China)
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Four-Branch Microstrip Leaky-Wave Antenna Array for Radiation Towards Broadside

Debabrata Kumar Karmokar (Macquarie University, Australia), Karu Esselle (Macquarie University, Australia) and Stuart G Hay (CSIRO ICT Centre, Australia)
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Yogesh Ranga (CSIRO, ICT Centre, Australia), Robert Shaw (CSIRO, Australia) and Stuart G Hay (CSIRO ICT Centre, Australia)
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Performance Comparison of Wideband Circularly-Polarized Antenna Arrays: Comparison of Microstrip-Line- and Metamaterial-Line-Based Feed Networks

Kwok Chung (University of Western Sydney, Australia) and Sergey Kharkovsky (University of Western Sydney & UWS, Australia)
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Microstrip Patch Antenna Array at 3.8 GHz for WiMax and UAV Applications

Hassan Sajjad (King Saud University, Saudi Arabia), Waleed Tariq Sethi (King Saud University, Saudi Arabia), Khan Afridi (King Saud University, Saudi Arabia) and Adnan Mairaj (King Saud University, Saudi Arabia)
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Coffee Break

Invited 2: New Materials and Composites for Antenna Applications

Efficiency Improvement of Small Slotted Annular Ring Antenna Using Laminated Conductors

Lotfollah Shafai (University of Manitoba, Canada) and Robin Raju (University of Manitoba, Canada)
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Antennas on materials: small, robust, flexible

David V Thiel (Griffith University, Australia)
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Conformal load bearing antenna structure using Carbon Fibre Reinforced Polymer (CFRP)

Kamran Ghorbani (RMIT University, Australia)
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Recent Developments in Reflectarrays: Multi-Reconfiguration, Solar Cells, and Graphene

Julien Perruisseau-Carrier (Ecole Polytechnique Fédérale de Lausanne & EPFL, Switzerland)
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Novel High-Tc Superconducting Devices for Wireless Communications and Imaging

Jia Du (CSIRO, Australia), Ting Zhang (CSIRO, Australia) and Y Jay Guo (CSIRO, Australia)
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Stuart G Hay (CSIRO ICT Centre, Australia)
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Welcome Reception - Sponsored by LEAP Australia

Registration Open

Invited 3: Arrays, MIMO, Beamforming and Indoor Propagation

Indoor Wireless Communications - An Electromagnetic Compatibility Challenge

Michael J Neve (The University of Auckland, New Zealand), Martin Leung (The University of Auckland, New Zealand) and John Cater (The University of Auckland, New Zealand)
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Designing Buildings to Support High Capacity Wireless Networks

Kevin W Sowerby (The University of Auckland, New Zealand) and Michael J Neve (The University of Auckland, New Zealand)
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Low-Cost Smart Antennas for Advanced Wireless Systems

Steven Gao (University of Kent, United Kingdom) and Qi Luo (University of Kent, United Kingdom)
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Impact of Size and Decoupling Element on Some Fundamental Compact MIMO Antennas

Kun Zhao (Royal Institute of Technology & Sony Mobile Communication AB, Sweden), Shuai Zhang (Royal Institute of Technology, Sweden), Chi-Yuk Chiu (Sony Mobile Communications, P.R. China), Zhinong Ying (Sony Mobile, Sweden) and Sailing He (Royal Institute of Technology, Sweden)
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Research on Planar Antenna Arrays

Ronghong Jin (Shanghai Jiao Tong University, P.R. China), Sheng Ye (Shanghai Jiao Tong University, P.R. China), Xianling Liang (Shanghai Jiaotong University, P.R. China) and Junping Geng (Shanghai Jiaotong University, P.R. China)
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Optimal Design of Antenna Arrays

Geyi Wen (Nanjing University of Information Science and Technology, P.R. China)
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Invited 4: Reconfigurable Antennas

Ultra-Wideband Conformal Apertures with Digital Beamforming for UHF to Millimeter-Wave Applications

John L. Volakis (Ohio State University, USA), Elias A. Alwan (The Ohio State University & The Electrosience Lab, USA), Dimitris Papantonis (Ohio State University, USA) and Waleed Khalil (The Ohio State University, USA)
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Reconfigurable Deployable Antennas for Space Communications

Joseph Costantine (American University of Beirut & University of New Mexico, USA), Youssef Tawk (The University of New Mexico & Notre Dame University Louaize, USA) and Christos Christodoulou (University of New Mexico, USA)
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Low-Cost Beamforming Employing Reconfigurable Antennas

Y Jay Guo (CSIRO, Australia), Peiyuan Qin (CSIRO Computational Informatics, Australia) and Can Ding (CSIRO Computational Informatics & Xidian University, Australia)
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Seong-Ook Park (Korea Advanced Institute of Science and Technology, Korea)
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A Closely Spaced Switched Beam Antenna

Hiroyuki Arai (Yokohama National University, Japan)
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Lunch

Interactive 2.1: Biomedical Applications

Incorporating Estimated Green's Functions in Microwave Breast Cancer Imaging with DORT

Mohammed Jainul Abedin (CSIRO & CSIRO Computational Informatics, Australia), Stuart G Hay (CSIRO ICT Centre, Australia) and Iain B. Collings (CSIRO, Australia)
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Implantable Compact Antennas for Wireless Bio-Telemetry: A Comparative Study

Shahidul Islam (Macquarie University, Australia), Karu Esselle (Macquarie University, Australia), David Bull (BCS Innovations, Australia) and Paul Pilowsky (Macquarie University, Australia)
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Unidirectional Antenna with Planar Reflector for Heart Failure Detection Systems

Sasan Ahdi Rezaeieh (The University of Queensland, Australia), Ummee Ahmed (The University of Queensland, Australia) and Amin M Abbosh (The University of Queensland, Australia)
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Polarization Diversity on Microwave Tomography

Latifah Mohamed (Universiti Malaysia Perlis, Malaysia) and Yoshihiko Kuwahara (Shizuoka University, Japan)
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Broadband Zigzag Corrugated Taper Slot Antenna for Heart Failure Detection Systems

Sasan Ahdi Rezaeieh (The University of Queensland, Australia) and Amin M Abbosh (The University of Queensland, Australia)
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Low profile Ultra-wideband Directional Antenna Operating in Low Microwave Band for Brain Stroke Diagnostic System

Ahmed Mobashsher (Staff House Road, St Lucia & The University of Queensland, Australia) and Amin M Abbosh (The University of Queensland, Australia)
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A Wideband Differential Directional Antenna for Head Implants

Terence S.P. See (Institute for Infocomm Research, Singapore), Wei Liu (Institute for Infocomm Research, Singapore), Xianming Qing (Institute for Infocomm Research, Singapore) and Zhi Ning Chen (National University of Singapore & Institute for Infocomm Research, Singapore)
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Interactive 2.2: FSS, EBG, Reflect-Arrays & Meta-Surfaces

Phase-compensated metasurface for conformal sectoral beam antennas

Dylan Germain (Université Paris Sud, France), Divitha Seetharamdoo (IFSTTAR, LEOST & Univ Lille Nord de France, France), Shah Nawaz Burokur (Institut d'Electronique Fondamentale - Université Paris-Sud, France) and André de Lustrac (Institut d'Electronique Fondamentale - Université Paris-Sud, France)
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Phase-gradient metasurfaces for beam steerable antennas

Amirhossein Ghasemi (Université Paris Ouest La Défense, France), Shah Nawaz Burokur (Institut d'Electronique Fondamentale - Université Paris-Sud, France), Abdallah Dhouibi (Institut d'Electronique Fondamentale - Université Paris Sud, France) and André de Lustrac (Institut d'Electronique Fondamentale - Université Paris-Sud, France)
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Design of Finite FSS-backed Reflectarray by Using BDP-CG Method

Keisuke Konno (Tohoku University, Japan), Qiang Chen (Tohoku University, Japan), Suguru Kameda (Tohoku University, Japan) and Noriharu Suematsu (Tohoku University, Japan)
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Carpet cloak with photonic crystal shield

Shenyun Wang (Nanjing University of Information Science & Technology, P.R. China)
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Design of Dual-band Frequency Selective Surface with Miniaturized Elements

Amir Ebrahimi (University of Adelaide, Australia), Withawat Withayachumnankul (The University of Adelaide, Australia), Said Al-Sarawi (The University of Adelaide & Director of Centre for Biomedical Engineering, Australia) and Derek Abbott (University of Adelaide, Australia)
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Design of Polarization-Dependent Reflectarray for Terahertz Waves

Tiaoming Niu (University of Adelaide, Australia), Withawat Withayachumnankul (The University of Adelaide, Australia), Derek Abbott (University of Adelaide, Australia) and Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia)
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Screen printed frequency selective surfaces for room isolation in buildings

Aliya A. Dewani (Griffith University, Australia), Manimaran Kanesan (Griffith University, Australia), David V Thiel (Griffith University, Australia), Steven O'Keefe (Griffith University, Australia) and Mohammad Vatankhah Varnoosfaderani (Griffith University & Center for Wireless Monitoring and Application, Griffith University, Australia)
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3D Frequency Selective Surfaces with Wideband Response

Saidatul Azemi (RMIT University, Australia), Kamran Ghorbani (RMIT University, Australia) and Wayne Rowe (RMIT University, Australia)
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Anisotropic cloaking of a metallic cylinder

Ladislau Matekovits (Politecnico di Torino, Italy), Yogesh Ranga (CSIRO, ICT Centre, Australia), Trevor S. Bird (Antengenuity & CSIRO, Australia), Karu Esselle (Macquarie University, Australia) and Mario Orefice (Politecnico di Torino, Italy)
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Electromagnetic Band Gap Materials Enhance Radar Cross section of Trihedral Corner Reflectors with Circular Polarization Under Rain Conditions

Demyana Saleeb (Kafr Elshiek University, Egypt), Ahmed Saad Elkorany (menouf, menoufia, Egypt), Said Elhalafawy (Menouf, Menoufia, Egypt) and Arafa Nasef (Faculty of Engineering, Kafr Elshiekh University, Egypt)

A Low-Profile Single-Layer UWB Polarization Stable FSS for Electromagnetic Shielding Applications

Irfan Sohail (Macquarie University, Australia), Yogesh Ranga (CSIRO, ICT Centre, Australia), Ladislau Matekovits (Politecnico di Torino, Italy), Karu Esselle (Macquarie University, Australia) and Stuart G Hay (CSIRO ICT Centre, Australia)
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Circularly Polarized High Gain Multiband Antenna for Non-Linear Junction Detector System

Kim In-hwan (Korea Maritime and Ocean University, Korea) and Kyeong-sik Min (Korea Maritime and Ocean University, Korea)
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Dual-Band VHF/UHF Smartphone Antenna for Mobile Digital Television

Andrew R Weily (CSIRO Computational Informatics, Australia), Ken Smart (CSIRO Computational Informatics, Australia) and Trevor S. Bird (Antengenuity & CSIRO, Australia)
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Dual Band Microstrip Patch Antenna for WiMAX and WLAN Applications

Muhammad Haroon Tariq (National University of Sciences and Technology (NUST), Islamabad, Pakistan)

Dual-band MIMO antenna using double-T structure for WLAN applications

Wen Zhao (The University of Hong Kong, Hong Kong), Li Liu (The University of Hong Kong, Hong Kong), William S. W. Cheung (The University of Hong Kong, Hong Kong) and Yunfei Cao (The University of Hong Kong, Hong Kong)
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Mitsutaka Hikita (Kogakuin University, Japan) and Tateo Sato (Kogakuin University, Japan)
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RFID Reader Pad using Free Access Transmission Line for Arbitrary Oriented Tag Antennas

Takuya Okura (Yokohama National University, Japan) and Hiroyuki Arai (Yokohama National University, Japan)
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EVM and BER Evaluation of C band New Airport Surface Communication Systems

Kazuyuki Morioka (Electronic Navigation Research Institute, Japan), Naoki Kanada (Electronic Navigation Research Institute, Japan), Shunichi Futatsumori (Electronic Navigation Research Institute, Japan), Junichi Honda (Electronic Navigation Research Institute, Japan), Akiko Kohmura (Electronic Navigation Research Institute, Japan), Naruto Yonemoto (Electronic Navigation Research Institute, Japan), Yasuto Sumiya (Electronic Navigation Research Institute, Japan) and David Asano (Shinshu University, Japan)
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An assessment of simulation methodologies for the analysis of near-field radiation zones related to human exposure

Hugo G. Espinosa (Griffith University, Australia), David V Thiel (Griffith University, Australia) and Chris Brindley (Corearth Australia Pty Ltd, Australia)
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Antenna Placement on a Large Mining Vehicle

Thomas Kaufmann (The University of Adelaide, Australia), Urban Maeder (SAFEmine AG, Switzerland) and Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia)
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Effect of Antenna Bandwidth and Placement on the Robustness to User Interaction

Emil Buskgaard (Aalborg University, Denmark), Alexandru Tatomirescu (Aalborg University, Denmark), Samantha Caporal Del Barrio (Aalborg University, Denmark), Ondřej Franek (Aalborg University & APNet Section, Denmark) and Gert Pedersen (Aalborg University, Denmark)
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Coffee Break

Invited 5: Metamaterials and EBGs

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Hisamatsu Nakano (Hosei University, Japan), Kenta Yoshida (Hosei University, Japan) and Junji Yamauchi (College of Engineering, Japan)
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Piergiorgio L.E. Uslenghi (University of Illinois at Chicago, USA), Danilo Erricolo (University of Illinois at Chicago, USA) and Tadahiro Negishi (University of Illinois at Chicago, USA)
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Three Kinds of Microwave Metamaterial Lenses

Tie Jun Cui (Southeast University, P.R. China) and Wenxuan Tang (Southeast University, P.R. China)
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Metamaterial Arrays and Applications: FSS, EBG & AMC structures

J (Yiannis) Vardaxoglou (Loughborough University, United Kingdom)
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Effective Techniques for Extending the Directivity-Bandwidth of Resonant Cavity Antennas

Raheel Hashmi (Macquarie University, Australia), Basit Ali Zeb (Macquarie University, Australia) and Karu Esselle (Macquarie University, Australia)
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Tunable, switchable, and one-way electromagnetic wave absorbers based on metamaterial structures

Yijun Feng (Nanjing University, P.R. China), Bo Zhu (Nanjing University, P.R. China), Junming Zhao (Nanjing University, P.R. China), Hao Yuan (Nanjing University, P.R. China), Liang Sun (Nanjing University, P.R. China) and Tian Jiang (Nanjing University, P.R. China)
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Conference Banquet - (Harbour Ballroom, King Street, Wharf 2)

Registration Open

Invited 6: Millimeter-wave, THz and Optical Antennas

Dielectric Resonator Nano-Antennas: A Pathway to Efficient Optical Antennas

Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia), Longfang Zou (Imperial College, United Kingdom) and Withawat Withayachumnankul (The University of Adelaide, Australia)
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Silicon Micromachined Terahertz Receiver Systems

Goutam Chattopadhyay (NASA-JPL, Caltech, USA)

Millimeter Wave Wireless Networks with Diversity against Localized Rain

Makoto Ando (Tokyo Institute of Technology, Japan), Jiro Hirokawa (Tokyo Institute of Technology, Japan), Takuichi Hirano (Tokyo Institute of Technology, Japan), Hung V. Le (Tokyo Institute of Technology, Japan), Toru Taniguchi (Japan Radio Co., Ltd., Japan), Riichiro Nagareda (KDDI R&D Laboratories Inc., Japan) and Akira Yamaguchi (KDDI R&D Laboratories Inc., Japan)
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Design of Inhomogeneous Dielectric Flat Lens with 2×2 TacLamPLUS Microstrip Array Feeder

Mustafa K. Taher Al-Nuaimi (State Key Laboratory of Millimeter Waves, Southeast University, P.R. China), Hong Wei (Southeast University, P.R. China) and Wen-Xun Zhang (Southeast University, P.R. China)
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A New Class of Printed Leaky Wave Antennas

Yahia Antar (Royal Military College of Canada, Canada)

Measurement Setups for Millimeter-Wave Antennas at 60/140/270 GHz Bands

Xianming Qing (Institute for Infocomm Research, Singapore) and Zhi Ning Chen (National University of Singapore & Institute for Infocomm Research, Singapore)
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Coffee Break

Invited 7: Wearable Antennas and Biomedical Applications

New Challenges in the Design of Electromagnetic Communication Systems

Raj Mittra (Penn State University, USA)
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Dual-mode Wearable Antenna for On-/off-body Wireless Communications

Chia-Hsien Lin (Fujitsu Kyushu Network Technologies Limited, Japan) and Koichi Ito (Chiba University, Japan)
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Low-Profile Antennas for On-Body Surface Communications

Jaehoon Choi (Hanyang University, Korea), Jinpil Tak (Hanyang University, Korea) and Kyeol Kwon (Hanyang University, Korea)
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Microwave-Based System Using Directional Wideband Antennas for Head Imaging

Amin M Abbosh (The University of Queensland, Australia)
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Towards Analytic Path Loss Models in On-Body Wireless Communications

Dirk Manteuffel (University of Kiel, Germany)
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Indoor Positioning using Novel Multi-loop HF RFID Reader Antennas

Ananda Sanagavarapu Mohan (University of Technology Sydney (UTS), Australia) and Mohd Yazed Ahmad (University of Malaya & Faculty of Engineering, University of Malaya, Malaysia)

Lunch

Interactive 3.1: Wideband and UWB Antennas

Compact UWB Power Divider with Unequal Distribution Ratio

Feng Wei (Xidian University & National Laboratory of Science and Technology on Antennas and Microwaves, P.R. China), Xiao Wei Shi (Xidian University, P.R. China), Peiyuan Qin (CSIRO Computational Informatics, Australia) and Y Jay Guo (CSIRO, Australia)
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Near-Field Characteristics of a Wideband Travelling-Wave Antenna Based on a Tapered Half-Mode Substrate-Integrated Waveguide

Nghia Nguyen-Trong (University of Adelaide, Australia), Thomas Kaufmann (The University of Adelaide, Australia) and Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia)
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Miniaturization of the half ring monopole antenna using self complementary method for UWB application

Mohammad Mahfuz Hussain (North South University, Bangladesh), Atiqur Rahman (North South University, Bangladesh) and Christina Gomes (North South University, Bangladesh)
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A Broadband Cage Antenna Optimized by Genetic Algorithm

Jingya Deng (Institute of China Electronic System Engineering Corporation, P.R. China), Xiaojun Chen (Institute of China Electronic System Engineering Corporation, P.R. China), Rui Yu (Institute of China Electronic System Engineering Corporation, P.R. China) and Xiang Wen (Institute of China Electronic System Engineering Corporation, P.R. China)
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Wideband Feed Systems for Radio Astronomy

John Kot (BAE Systems Australia Ltd, Australia), Christophe Granet (BAE Systems Australia Ltd, Australia), Ian Davis (BAE Systems Australia Ltd, Australia) and Greg Pope (BAE Systems Australia Ltd, Australia)
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Frequency-Domain Synthesis of Ultra-Wide Band Antennas with a Flat Response

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Bandwidth and Gain Enhancement of a Printed Wide Slot Antenna

Md. Samsuzzaman (Universiti Kebangsaan Malaysia, Malaysia), Mohammad Tariqul Islam (Institute of Space Science (ANGKASA) & Universiti Kebangsaan Malaysia, Malaysia) and M. Habib Ullah (International Islamic University Malaysia, Malaysia)

Design of Broad Circularly Polarized Square Slot Antenna With a CPW-Fed

Wen Jiang (Xidian University, P.R. China), Shu Gong (National Laboratory of Antennas and Microwave Technology, P.R. China), Guang Fu (Xidian University, P.R. China), Yan-ping Li (Xidian University, P.R. China) and Lin Yang (Xidian University, P.R. China)
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Yongtao Jia (National Laboratory of Science and Technology on Antenna and Microwaves, Xidian University, P.R. China), Ying Liu (Xidian University, P.R. China) and Shuxi Gong (Xidian University, P.R. China)
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Kwok Chung (University of Western Sydney, Australia), Sarawuth Chaimool (King Mongkut's University of Technology North Bangkok, Thailand), Tanaporn Pechrkool (King Mongkut's University of Technology North Bangkok Bangkok, Thailand) and Prayoot Akkaraekthalin (King Mongkut's University of Technology North Bangkok, Thailand)
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Wenzhi Wang (Shanghai Jiao Tong University, P.R. China), Junping Geng (Shanghai Jiaotong University, P.R. China), Ronghong Jin (Shanghai Jiao Tong University, P.R. China), Xianling Liang (Shanghai Jiaotong University, P.R. China) and Richard W. Ziolkowski (University of Arizona, USA)
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Tsubasa Terada (Hokkaido University, Japan), Toshihiko Nishimura (Hokkaido University, Japan), Yasutaka Ogawa (Hokkaido University, Japan), Takeo Ohgane (Hokkaido University, Japan) and Hiroyoshi Yamada (Niigata University, Japan)
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Maria Jesús Algar (University of Alcalá, Spain), Oscar Gutiérrez Blanco (Universidad de Alcalá, Spain), Miguel Angel Navarro (Universidad de Alcalá, Spain), José Manuel Gómez (University of Alcalá, Spain) and Francisco Saez de Adana (Universidad de Alcalá, Spain)
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Zahra Shaterian (The University of Adelaide, Australia), Thomas Kaufmann (The University of Adelaide, Australia) and Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia)
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Coffee Break

Debate: Debate - The Future of Metamaterial Antennas

Debate chaired by Raj Mittra (Pennsylvania State University) with:

- Zhining Chen (National University of Singapore)
- Rick Ziolkowski (The University of Arizona)
- J. (Yiannis) Vardaxoglou (Loughborough University)
- John L. Volakis (The Ohio State University)

Closing Ceremony