



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

W1 (*Opening Session*)

Session time Wednesday, 08:30 until 10:10

Location Sea Oats

Chaired by Xun Gong (University of Central Florida, USA)
Richard V. Snyder (RS Microwave Company Inc., USA)

08:30: *Introduction*

Xun Gong (University of Central Florida, USA)

08:40: *Message from MTT-S President*

Maurizio Bozzi (University of Pavia, Italy)

08:45: *Microwave Filters – Past, Present and Future*

Jerry Fiedziuszko (Space Systems-LORAL, USA)

09:30: *A Novel Tunable Dual-Band Filter to Achieve a Wide Tuning Range Using One Tuning Element*

Seyyed Mojtaba Pourjaafari (University of Waterloo, Canada); Mohamed Fahmi (Defence Research and Development Canada & University of Waterloo, Canada); Raafat R. Mansour (University of Waterloo, Canada)

09:50: *Multi-functional RF Filter with Co-Designed Low Noise Amplifier and RF Switching Capabilities*

Steven Matthew Cheng (University College Cork & Tyndall National Institute, Ireland); Dimitra Psychogiou (University College Cork and Tyndall National Institute, Ireland)

10:10: Coffee Break



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW) W2 (*Tunable and Multi-Function Filters*)

Session time Wednesday, 10:40 until 12:20

Location Sea Oats

Chaired by Raafat R. Mansour (University of Waterloo, Canada)
Dimitra Psychogiou (University College Cork and Tyndall
National Institute, Ireland)

10:40: Tunable Coaxial Resonator Filter based on Posts with Rectangular Bars

Fynn Kamrath (Kiel University, Germany); Patrick Boe (Kiel University, Germany); Kennet Braasch (Kiel University, Germany); Daniel Bruhn (Kiel University, Germany); Daniel Miek (Kiel University, Germany); Michael Höft (Kiel University, Germany)

11:00: Electronically Reconfigurable Filtennas for S-band and X-band Operation

Rosalind Agasti (University of Oklahoma, USA); Adrian Bauer (University of Oklahoma, USA); Jessica Ruyle (University of Oklahoma, USA); Hjalti Sigmarsson (University of Oklahoma, USA)

11:20: Multi-Octave, Reconfigurable Bandpass Filters

Matthew Torpey (Northrop Grumman, USA); Taylor Brown (Northrop Grumman Mission Systems, USA); Andrew Botelho (Northrop Grumman Mission Systems, USA); Andras Resch (Northrop Grumman Mission Systems, USA); Sean McLoughlin (Northrop Grumman Mission Systems, USA); Fay Lin (Northrop Grumman Mission Systems, USA); Jonathan Egan (Northrop Grumman Mission Systems, USA)

11:40: Novel Compact Tunable Filter Prototype Realized with Vanadium Dioxide

Thomas G. Williamson (Georgia Tech Research Institute, USA); T. Robert Harris (Georgia Tech Research Institute, USA); George Che (Georgia Tech Research Institute, USA); Nima Ghalichechian (Georgia Institute of Technology, USA)

12:00: Miniaturized Fully Reconfigurable Bandpass Filter with Automated Varactor Biasing

El Mehdi Messaoudi (UPV-Universidad Politécnica de Valencia, Spain); José Vicente Martínez Sánchez de Rojas (ITEAM, Spain); Jorge D. Martinez (Universitat Politecnica de Valencia & ETSI Telecomunicacion, Spain); Vicente Boria (Universidad Politécnica de Valencia, Spain)

12:20: Lunch



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

W3 (*Cavity Filters*)

Session time Wednesday, 13:40 until 15:20

Location Sea Oats

Chaired by Luca Pelliccia (RF Microtech Srl, Italy)
Cristiano Tomassoni (University of Perugia, Italy)

13:40: The Resonant Input: Pushing The Boundaries Of Coaxial Comb-Line Evanescent Mode Filters

Simone Bastioli (RS Microwave Company Inc, USA); Richard V. Snyder (RS Microwave Company Inc., USA)

14:00: Ku-band MUX Based On Ceramic-loaded Barrel-shaped For High-power Satellite Applications

Luca Pelliccia (RF Microtech Srl, Italy); Fabrizio Cacciamani (RF Microtech Srl, Italy); Paolo Vallerotonda (RF Microtech srl / University of Perugia, Italy); Cristiano Tomassoni (University of Perugia, Italy); Oilid Bouzekri (ESA-ESTEC, The Netherlands)

14:20: Broad Stopband, Wide Passband, Bandstop Filter using the Spurious Bypass Method

Richard V. Snyder (RS Microwave Company Inc., USA); Simone Bastioli (RS Microwave Company Inc, USA); Kevin Keck (RS Microwave, USA)

14:40: Novel Negative Coupling Structure for Rectangular Waveguide Cavity Filters

Oleksandr Glubokov (KTH Royal Institute of Technology, Sweden); Mohammad Mehrabi Gohari (KTH Royal Institute of Technology, Sweden)

15:00: Robust and Flexible Design for Effective Low-Pass Filters Exploiting a Passband Replica

David Santiago (Public University of Navarre, Spain); Miguel Laso (Public University of Navarre, Spain); Txema Lopetegui (Public University of Navarre, Spain); Ivan Arregui (Public University of Navarre, Spain)

15:20: Coffee Break



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

W4A (*Filter Synthesis*)

Session time Wednesday, 15:50 until 17:30

Location Sea Oats

Chaired by Giuseppe Macchiarella (Politecnico di Milano, Italy)
Matteo Oldoni (Politecnico di Milano, Italy)

15:50: Properties of Triplets with Complex Reflection Zeros

Matteo Oldoni (Politecnico di Milano, Italy); Stefano Tamiazzo (Commscope, Italy); Giuseppe Macchiarella (Politecnico di Milano, Italy)

16:10: Transitioning from Analytical to Numerical Methods for Synthesizing Microwave Bandpass Filters

Junyi Liu (The Chinese University of Hong Kong, Hong Kong); Ke-Li Wu (The Chinese University of Hong Kong, Hong Kong)

16:30: Systematic Synthesis of Synchronous Four Port Filtering Couplers

Mohamed Fahmi (Defence Research and Development Canada, Canada); Ali Atia (USA); Raafat R. Mansour (University of Waterloo, Canada)

16:50: Synthesis of All-Resonator Multiplexers

Abolfazl Mostaani (University of Birmingham, United Kingdom (Great Britain)); Talal Skaik (University of Birmingham, United Kingdom (Great Britain)); Yi Wang (University of Birmingham, United Kingdom (Great Britain))

17:10: Exhaustive Synthesis of Microwave Filter Topologies Based on Total Degree Homotopy

Yi Zeng (The Southern University of Science and Technology, China); Ming Yu (Southern University of Science and Technology, China)



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW) W4B (*Planar Filters*)

Session time Wednesday, 15:50 until 17:30

Location Sawgrass

Chaired by Roberto Gómez-García (University of Alcalá, Spain)
Matthew Torpey (Northrop Grumman, USA)

15:50: *Filtering Microstrip to Waveguide Launcher*

Steven Caicedo Mejillones (SIAE Microelettronica, Italy); Stefano Moscato (SIAE Microelettronica, Italy); Matteo Oldoni (Politecnico di Milano, Italy); Lorenzo Silvestri (Università di Pavia, Italy); Andrea Brasi (Università di Pavia, Italy); Maurizio Bozzi (University of Pavia, Italy)

16:10: *RF Input-Quasi-Reflectionless Dispersive-Delay Structures Based on Complementary-Diplexer Circuits*

Maciej Jasinski (Gdansk University of Technology, Poland); Adam Lamecki (Gdansk University of Technology, Poland); Roberto Gómez-García (University of Alcalá, Spain); Michal Mrozowski (Gdansk University of Technology, Poland)

16:30: *RF Co-Designed High-Selectivity Bandpass Filter/Attenuator (BPFA) With Tunable Attenuation*

Adnan Nadeem (Frederick Research Center, Cyprus); Symeon Nikolaou (Frederick Research Center & Frederick University, Cyprus); Hammad Aziz Mirza (National University of Sciences and Technology, Pakistan); Zixiao Zhang (University College Cork & Tyndall National Institute, Ireland); Dimitra Psychogiou (University College Cork and Tyndall National Institute, Ireland); Photos Vryonides (Frederick Research Center and Frederick University, Cyprus)

16:50: *Microstrip-to-Microstrip Vertical Transition With Quasi-Elliptic-Type Dual-Band Filtering Response*

Li Yang (University of Alcalá, Spain); Roberto Gómez-García (University of Alcalá, Spain)

17:10: *Compact Reconfigurable Matching Network for Antenna Detuning Mitigation in Smart Surfaces*

Joryan Sennesael (Ghent University & Imec, Belgium); Kamil Yavuz Kapusuz (Ghent University & IMEC, Belgium); Sam Lemey (Ghent University-imec, Belgium); Patrick Van Torre (Ghent University, Belgium); Hendrik Rogier (Ghent University, Belgium)

18:30: Reception



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

TH1 (*Acoustic SAW/BAW Resonator and Filters*)

Session time Thursday, 08:30 until

10:10 Location Sea Oats

Chaired by Jordi Mateu (Barcelona TECH - UPC, USA)
Kalyan K Karnati (Qorvo Inc, USA)

08:30: Better decisions during early design stages based on synthesis methodologies for AW filters

Jordi Verdu (Universitat Autònoma de Barcelona, Spain)

09:10: BAW Filter Trends for 5G and Beyond

Eloi Guerrero (Qorvo, Spain); Alfred Gimenez (Qorvo, USA); Wolfgang Heeren (Qorvo, USA); Mudar AlJoumayly (Qorvo Inc, USA)

09:30: A 5G n77 Filter Using Shear Bulk Mode Resonator With Crystalline X-cut Lithium Niobate Films

Florian Hartmann (EPFL, Switzerland); Seniz E Kucuk Eroglu (EPFL, Switzerland); Edgar Navarro-Gessé (Universitat Politècnica de Catalunya, Spain); Carlos Collado (Universitat Politècnica de Catalunya (UPC), Spain); Jordi Mateu (Barcelona TECH - UPC, USA); Luis Guillermo Villanueva (Ecole Polytechnique Federale de Lausanne, Switzerland)

09:50: Control of the miniaturization degree in BAW CRF filter

Jordi Mateu (Barcelona TECH - UPC, USA); Edgar Navarro-Gessé (Universitat Politècnica de Catalunya, Spain); Carlos Collado (Universitat Politècnica de Catalunya Barcelona (UPC), Spain)

10:10: Coffee Break



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW) TH2 (*Acoustic SAW/BAW Resonator and Filters*)

Session time Thursday, 10:40 until 12:20

Location Sea Oats

Chaired by Jordi Verdu (Universitat Autònoma de Barcelona, Spain)
David Molinero (Skyworks Solution, inc, USA)

10:40: 18 GHz Microacoustic ScAIN Lamb Wave Resonators for Ku Band Applications

Luca Colombo (Northeastern University, USA); Gabriel Giribaldi (Northeastern University, USA); Matteo Rinaldi (Northeastern University, USA)

11:00: 38.7 GHz Thin Film Lithium Niobate Acoustic Filter

Omar Armando Barrera Juarez (University of Texas at Austin, USA); Sinwoo Cho (University of Texas at Austin, USA); Jack P Kramer (University of Texas at Austin, USA); Vakhtang Chulukhadze (University of Texas at Austin, USA); Joshua Campbell (University of Texas at Austin, USA); Ruochen Lu (The University of Texas at Austin, USA)

11:20: A Behavioral Model of a Resonator for Use in Modeling the H2 Emissions of a BAW Filter

David Molinero (Skyworks Solution, inc, USA); Dave Feld (Skyworks Solutions, USA)

11:40: Matching network absorption in ladder electroacoustic filters

Edgar Navarro-Gessé (Universitat Politècnica de Catalunya, Spain); Jordi Mateu (Barcelona TECH - UPC, USA); Carlos Collado (Universitat Politècnica de Catalunya Barcelona (UPC), Spain); Marta Gonzalez Rodriguez (Qorvo, Germany)

12:00: Bandwidth-Reconfigurable Acoustic Wave Filter with a Large Tuning Range

Matthew Ou (University of Waterloo, Canada); Arash Fouladi Azarnaminy (University of Waterloo, Canada); Raafat R. Mansour (University of Waterloo, Canada)

12:20: Lunch



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

TH3 (*3D Printed Filters*)

Session time Thursday, 13:40 until 15:20

Location Sea Oats

Chaired by Cristiano Tomassoni (University of Perugia, Italy)
Luca Pelliccia (RF Microtech Srl, Italy)

13:40: AM of Zirconia DR Filters Produced by Direct Ink Writing of Particles with Bimodal Size Distribution

Patrick Boe (Kiel University, Germany); Philipp Schadte (Kiel University, Germany); Rainer Adelung (Kiel University, Germany); Leonard Siebert (Kiel University, Germany); Michael Höft (Kiel University, Germany)

14:00: 3D printed Alumina filters for Q band space telecommunication

Nicolas Delhote (XLIM - UMR CNRS, University of Limoges, France); Olivier Tantot (XLIM - University of Limoges, France); Aurelien Perigaud (XLIM UMR7252, Université de Limoges/CNRS, France); Pierre-Marie Geffroy (SPCTS - UMR CNRS 7315 - University of Limoges, France); Serge Verdeyme (LIM UMR 6172, Université de Limoges/CNRS, France); Hervé Leblond (Thales Alenia Space, France); Christophe Chaput (3D Ceram, France)

14:20: Monolithically-Integrated Coaxial Resonator-Based Bandstop Filters Enabled by SLA 3D Printing

Kunchen Zhao (University of Colorado Boulder, USA); Symeon Nikolaou (Frederick Research Center & Frederick University, Cyprus); Photos Vryonides (Frederick Research Center and Frederick University, Cyprus); Dimitra Psychogiou (University College Cork and Tyndall National Institute, Ireland)

14:40: Monolithic FDM 3-D Printed Waveguide Filters

Daniel Miek (Kiel University, Germany); Patrick Boe (Kiel University, Germany); Daniel Bruhn (Kiel University, Germany); Fynn Kamrath (Kiel University, Germany); Kennet Braasch (Kiel University, Germany); Michael Höft (Kiel University, Germany)

15:00: 3-D Printed Surface-Mounted Ceramic Filters: Temperature Drift Effect on Coupling Parameters

Andrés Fontana (Tyndall National Institute University, Ireland); Aurelien Perigaud (XLIM UMR7252, Université de Limoges/CNRS, France); Nicolas Delhote (XLIM - UMR CNRS, University of Limoges, France); Patrice Richard (Thales SIX GTS, France); David Carsenat (Thales SIX GTS, France); Guillaume Acikalin (Thales SIX GTS, France)

15:20: Coffee Break



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW) TH4A (*Acoustic Resonators and Filters*)

Session time Thursday, 15:50 until 17:35

Location Sea Oats

Chaired by Kalyan K Karnati (Qorvo Inc, USA)
Gokhan Ariturk (Texas Instruments, USA)

15:50: New Hybrid Filter for Wideband and Better Attenuation Using BAW and IPD Technology

Youna Jang (Soonchunhyang University, Korea (South)); Seo Koo (Soonchunhyang, Korea (South)); Dongsu Kim (Korea Electronics Technology Institute, Korea (South)); Minsoo Park (Korea Electronics Technology Institute & Yonsei, Korea (South)); Jong Min Yook (Korea Electronics Technology Institute, Korea (South)); Dal Ahn (Soonchunhyang University, Korea (South))

16:05: Optimizing Performance in Ladder-Type SAW Filter Using Modified IDT Configurations

Matthew Ou (University of Waterloo, Canada); Arash Fouladi Azarnaminy (University of Waterloo, Canada); Raafat R. Mansour (University of Waterloo, Canada)

16:20: Aspects of BAW filter harmonics wafer level testing

Susanne Kreuzer (Qorvo, USA)

16:35: Metal-Insulator-Metal Capacitor Integration in Bulk Acoustic Wave Filters

Ali Hosseini-Fahrjaji (Qorvo Inc., USA); Michael Schaefer (Qorvo, USA); Alfred Gimenez (Qorvo, USA)

16:50: Synthesis of the Acoustic Wave H-Ladder Filter Topology

Lluis Acosta (Universitat Autònoma de Barcelona, Spain); Carlos Caballero (Universitat Autònoma de Barcelona, Spain); Eloi Guerrero (Qorvo, Spain); Jordi Verdu (Universitat Autònoma de Barcelona, Spain); Pedro de Paco (Universitat Autònoma de Barcelona, Spain)

17:05: Cross-Coupling Simplification in Asymmetric Acoustic-Electromagnetic Filters

Gokhan Ariturk (Texas Instruments, USA); Yao Yu (Texas Instruments Santa Clara CA USA, USA); Ernest Ting-Ta Yen (Texas Instruments Santa Clara CA USA, USA); Hjalti Sigmarsson (University of Oklahoma, USA)

17:20: Management of Stored Energy in Acoustic Wave Ladder Filters to Improve Yield

Santi Cano (Universitat Autònoma de Barcelona (UAB), Spain); Mario Faura (Spain); Eloi Guerrero (Qorvo, Spain); Gustavo Piris Duarte (Universitat Autònoma de Barcelona, Spain); Jordi Verdu (Universitat Autònoma de Barcelona, Spain); Pedro Antonio de Paco Sanchez (UAB, Spain)



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

TH4B (*Miniature Filters*)

Session time Thursday, 15:50 until 17:30

Location Sawgrass

Chaired by Michal Mrozowski (Gdansk Univ. of Technology, Poland)
Photos Vryonides (Frederick Research Center and Frederick University, Cyprus)

15:50: Highly-Compact Dual-Band Bandpass Waveguide Filter Based on Cross-Shaped Frequency-Dependent Coupling

Muhammad Y Sandhu (Gdansk University of Technology & Sukkur IBA University, Pakistan); Lubina Iram (Sukkur-IBA University, Pakistan); Adam Lamecki (Gdansk University of Technology, Poland); Roberto Gómez-García (University of Alcalá, Spain); Michal Mrozowski (Gdansk University of Technology, Poland)

16:10: Circuit Model Extraction of Coupled-Resonator Filters and Multiplexers Via Direct Use of S-parameter

Timothy Reeves (MathWorks Inc., USA); Janakinadh Yanamadala (Worcester Polytechnic Institute, USA)

16:30: Design Solutions for Problems in Filters and Structures Using Self-Locking Tuning Screws

Itzhak Shapir (IS MW Consulting, Israel)

16:50: Modular Design and Optimization of A Fourth-Order Filter With Parallel Coupling Paths

Zai-Cheng Guo (Nanjing Normal University, China); Lei Zhu (University of Macau, Macao)

17:10: Staggered Filter Topology for Robust Fabrication of Air-Filled Substrate-Integrated-Waveguide Filter

Samuel Rimbaut (Universiteit Gent, Belgium); Hendrik Rogier (Ghent University, Belgium); Sam Lemey (Ghent University-imec, Belgium); Bram Hoflack (Universiteit Gent, Belgium); Thomas Vervust (Universiteit Gent, Belgium)

19:00: Dinner



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

F1A (*SIW Filters and Multiplexers*)

Session time Friday, 08:30 until 10:10

Location Sea Oats

Chaired by Anthony Ghiotto (Bordeaux INP, France)
 Daniel G Swanson (DGS Associates, LLC, USA)

08:30: Isolated Filtering System Based on the Emerging AFSIW Technology

Maxime Le Gall (Exens Solutions, France); Anthony Ghiotto (Bordeaux INP, France); Issam Marah (Exens Solutions, France)

08:50: Multiplexer Equal Ripple Optimization

Daniel G Swanson (DGS Associates, LLC, USA)

09:10: Advances on Multiplexer Synthesis: The Herringbone Topology

Lluís Acosta (Universitat Autònoma de Barcelona, Spain); Silvia Van Den Bogaart (Universitat Autònoma de Barcelona, Spain); Eloi Guerrero (Qorvo, Spain); Jordi Verdu (Universitat Autònoma de Barcelona, Spain); Yazid Yusuf (Qorvo, USA); Alfred Gimenez (Qorvo, USA); Pedro de Paco (Universitat Autònoma de Barcelona, Spain)

09:30: Consistent and Cost-Effective PCB-Based D-Band Air-Filled Substrate-Integrated-Waveguide Filters

Laura Van Messem (Ghent University, Belgium); Reinier Broucke (Ghent University, Belgium); Hendrik Rogier (Ghent University, Belgium); Siddhartha Sinha (Imec, Belgium); Ilja Ocket (Imec, Belgium); Heinrich Trischler (AT and S AG, Austria); Erich Schlaffer (AT&S AG, Germany); Daniel Schlick (AT and S AG, Austria); Sam Lemey (Ghent University, Belgium)

09:50: Enhancing Numerical Stability in Multiport Network Synthesis with Modified DK Method

Beizun Liu (Xidian University, China); Yimin Yang (Xi'dian University, China); Ming Yu (Southern University of Science and Technology, China)



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW) F1B (*Tunable and Multifunction Filters*)

Session time Friday, 08:30 until 10:10

Location Sawgrass

Chaired by Hjalti Sigmarsson (University of Oklahoma, USA)
Mohammad Abu Khater (Normal Computing, USA)

08:30:

08:50: *Reconfigurable TM-Mode Dielectric Bandpass Filter Using Liquid Metals*

Abdulrahman Widaa (Physikalisch-Technische Bundesanstalt, Germany); Fynn Kamrath (Kiel University, Germany); Michael Höft (Kiel University, Germany)

09:10: *Magnetostatic Wave Notch Filters Frequency Tuned Via a Zero DC Power Magnetic Bias Circuit*

Xingyu Du (University of Pennsylvania, USA); Shun Yao (University of Pennsylvania, USA); Yixiao Ding (University of Pennsylvania, USA); Zhehao Yu (University of Pennsylvania, USA); Alexander J. Geers (University of Pennsylvania, USA); Firooz Aflatouni (University of Pennsylvania, USA); Mark Allen (University of Pennsylvania, USA); Roy Olsson III (University of Pennsylvania, USA)

09:30: *Switch-Based Non-Reciprocal Filter for High-Power Applications*

Mohammad Abu Khater (Normal Computing, USA); Alden Fisher (Purdue University, USA); Dimitrios Peroulis (Purdue University, USA)

09:50: *On Modelling of Balanced Filters*

Oleksandr Glubokov (KTH Royal Institute of Technology, Sweden)

10:10: Coffee Break



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW) F2A (*3D Printed Filters*)

Session time Friday, 10:40 until 12:20

Location Sea Oats

Chaired by Esteban Menargues (SWISSto12, Switzerland)
 Hjalti Sigmarsson (University of Oklahoma, USA)

10:40: Additively Manufactured FHE-Enabled Wireless Ultrabroadband Modules

Manos M. Tentzeris (Georgia Institute of Technology, USA)

11:00: Development of Waveguide Filters through Lithography Metal Manufacturing Technology

Giuseppe Addamo (Istituto di Elettr. e di Ingegneria dell'Inform. e delle Telecom. (IEIIT-CNR), Italy); Oscar A. Peverini (Istituto di Elettr. e di Ingegneria dell'Inform. e delle Telecom. (IEIIT-CNR), Italy); Kay Reuter (Fraunhofer IFAM, Germany); Mauro Lumia (CNR, Italy); Oilid Bouzekri (ESA-ESTEC, The Netherlands)

11:20: Additive-Manufactured, Highly-Conductive Metasurfaces for Microwave Waveguide Components

Richard G. Edwards (University of Utah, USA)

11:40: Progress on metal Additive Manufactured waveguide filters: from L-band to Q/V-band

Esteban Menargues (SWISSto12, Switzerland); Stefano Sirci (SWISSto12 SA, Switzerland); María García-Vigueras (IETR-INSA Rennes, France)

12:00: 3D Printing Techniques for Narrowband Microwave Filters and Millimetre-Wave Filters

Yi Wang (University of Birmingham, United Kingdom (Great Britain))



IMFW 2024: 2024 IEEE International Microwave Filter Workshop (IMFW)

F2B (*Filter Synthesis*)

Session time Friday, 10:40 until 12:30

Location Sawgrass

Chaired by Ke-Li Wu (The Chinese University of Hong Kong, Hong Kong)
Mohamed Fahmi (Defence Research and Development Canada & University of Waterloo, Canada)

10:40: Coupled Resonator Bandpass Filters With Doubly Coupled Input/Output

Junyi Liu (The Chinese University of Hong Kong, Hong Kong); Ke-Li Wu (The Chinese University of Hong Kong, Hong Kong)

11:00: Dual-Band Lowpass-Bandpass Filter with Three Element Resonator Configuration

Yingjie Di (Comba Telecom Limited, China)

11:20: Synthesizability of Filtenna Arrays with Uniform Quality Factor

Matteo Oldoni (Politecnico di Milano, Italy); Gian Guido Gentili (Politecnico di Milano, Italy); Fabien Seyfert (HighF Solutions, Italy); Giuseppe Macchiarella (Politecnico di Milano, Italy); Cristina D'Asta (Politecnico di Milano, Italy)

11:40: Synthesizing Input-Reflectionless Filters With Transmission Zeros: First Cauer, Then Foster

Jongheun Lee (Korea University, Korea (South)); Juseop Lee (Korea University, Korea (South)); Seunggoo Nam (Korea Electronics Technology Institute, Korea (South)); Sehwan Choi (Korea Electronics Technology Institute, Korea (South))

12:00: Direct Band-Pass Synthesis of Wideband Reactive Filter based on Matrix Rotations

Mario Faura (Spain); Santi Cano (Universitat Autònoma de Barcelona (UAB), Spain); Lluís Acosta (Universitat Autònoma de Barcelona, Spain); Carlos Caballero (Universitat Autònoma de Barcelona, Spain); Jordi Verdu (Universitat Autònoma de Barcelona, Spain); Pedro Antonio de Paco Sanchez (UAB, Spain)

12:15: Direct Bandpass Synthesis of Wideband Lumped-Elements Filters Using Inductive Couplings

Carlos Caballero (Universitat Autònoma de Barcelona, Spain); Lluís Acosta (Universitat Autònoma de Barcelona, Spain); Eloi Guerrero (Qorvo, Spain); Jordi Verdu (Universitat Autònoma de Barcelona, Spain); Pedro de Paco (Universitat Autònoma de Barcelona, Spain)