



APMC 2025

2025 ASIA-PACIFIC MICROWAVE CONFERENCE

DEC 2 - 5, 2025 | ICC JEJU, Jeju Island, Korea

Session Title:

[FD2] Machine Learning and Numerical Modeling for Microwave Components

Session Date:

December 5 (Fri.), 2025

Session Time:

08:30-10:10

Session Room:

Room D (Samda B)

[FD2-1]

08:30-08:50

Deep Learning Based Modulation Parameters Extraction of Non-Reciprocal Bandpass Filter

Girdhari Chaudhary, Suyeon Kim, Palaystint Thorng, Alvaro Fuentes and Yongchae Jeong (Jeonbuk National University, Korea (South))

[FD2-2]

08:50-09:10

Deep Learning Enabled Inverse Design of Pixel-Based Bandpass Filters

Chandan Roy (Huawei Technologies Canada, Canada); Ming Jian (Huawei Technologies Co. LTD, Canada); Peyman Neshastegaran (Huawei Technologies Canada, Canada); Wen Yao Zhai (Huawei Technologies Canada Research Center, Canada)

[FD2-3]

09:10-09:30

Kernel-Based Machine Learning Surrogates for RF Circulator Design

Marco Atlante (Politecnico di Torino, Italy & University of Brest, Lab-STICC, Italy); Riccardo Trincherio and Igor S Stievano (Politecnico di Torino, Italy); Mihai Telescu (Université de Bretagne Occidentale, France); Norbert Parker (Lab-STICC, France & IMT-Atlantique, France); Vincent Laur (Lab-STICC / University of Brest, France); Noel Tanguy (Université de Bretagne Occidentale & Lab-STICC, France)

[FD2-4]

09:30-09:50

Machine Learning Based Energy Selective Surface Design Excluding Contradictory Structure

Ic-Pyo Hong (Kongju National University, Korea (South)); Seung-Heon Oh (Information and Communication Engineering, Korea (South))

[FD2-5]

09:50-10:10

Impedance Estimation of Internal Nodes of RF Devices Based on Measurement Cable de-Embedding Enabled by Transmission Line Model Fitting

Abdul Basir, Uzman Ali and Toni Björninen (Tampere University, Finland)