Session Title:	[FD2] AI and Physics-Based Approaches for RF/Microwave Component Design
Session Date:	December 5 (Fri.), 2025
Session Time:	10:30-12:10
Session Room:	Room D (Samda B)
Session Chair(s):	Fernando Daniel Quesada Pereira (Polytechnic University of Cartagena, Spain) Girdhari Chaudhary (Jeonbuk National University, Korea)

[FD2-1] 10:30-10:50

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] 10:50-11:10

A Bandpass SIW Filter with Sharp Roll-off Rate and Wide Stopband

Shiqi Jiang, Yuwei Zhang and Jinping Xu (Southeast University, China)

[FD2-3] 11:10-11:30

Kernel-Based Machine Learning Surrogates for RF Circulator Design

Marco Atlante (Politecnico di Torino, Italy & University of Brest, Lab-STICC, Italy); Riccardo Trinchero 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] 11:30-11:50

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] 11:50-12:10

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)