
Session Title	[PB-A7] Numerical Techniques 2
Date and Time	June 20 (Tuesday) / 14:10-16:00
Place	Rm. 103 (1F)
Session Chair	Kazuhiro Muramatsu (Chiba Univ., Japan)

PB-A7-1 **Digest ID: 61**

Non-linear Eigenmode Computations for Superconducting Cavities with a Surface Impedance Condition

Marsic, Nicolas; Ackermann, Wolfgang; De Gersem, Herbert
Technische Universität Darmstadt

PB-A7-2 **Digest ID: 55**

Low-rank tensor decompositions for high dimensional uncertainty quantification in electromagnetic field problems

Loukrezis, Dimitrios (1,2); Römer, Ulrich (1,2); De Gersem, Herbert (1,2)
1: Institut für Theorie Elektromagnetischer Felder, TU Darmstadt, Germany; 2: Graduate School Computational Engineering, TU Darmstadt, Germany

PB-A7-3 **Digest ID: 76**

The Impact of Spatial Uncertainties in the Magnetic Reluctivity on the Field Quality of a Combined Function Magnet

Jankoski, Radoslav (1,2); Römer, Ulrich (1,2); Schöps, Sebastian (1,2)
1: Institut für Theorie Elektromagnetischer Felder; 2: Graduate School of Excellence Computational Engineering

PB-A7-4 **Digest ID: 798**

Compensation Strategy of the Numerical Analysis in Frequency Domain on Induction Motor considering Magnetic Flux Saturation

Park, Gyeong-Jae (1); Lee, Ji-Han (1); Seo, SangHyeok (1); Kim, Yong-Jae (2); Jung, Sang-Yong (1)
1: Sungkyunkwan University, Korea, Republic of (South Korea); 2: Chosun University, Korea, Republic of (South Korea)

PB-A7-5 **Digest ID: 311**

A Remesh-free Finite-element Method for Large Geometrical Variations and its Application to Electric Machine Design

Liu, Xiaoyu; Fu, Weinong
The Hong Kong Polytechnique University, Hong Kong S.A.R. (China)

PB-A7-6 **Digest ID: 27**

Eddy Current Analysis of Three-Phase Transformer Made of Grain-Oriented Electrical Steel Sheets Using 3-D Parallel FEM

Kawase, Yoshihiro; Yamaguchi, Tadashi; Murashita, Masaya
Gifu University, Japan

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Digest ID: 331

Design and Analysis of a Novel Inductor Motor with Auxiliary Permanent Magnet Excitation

Fu, Xinghe; Wang, Jianhao; Liu, Kai; Lin, Mingyao
Southeast University, People's Republic of China,

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Digest ID: 387

Iterative Solution of MTL Based on the Spatial Decomposition and the 2nd order FDTD

du, xuelong; zhang, pengfei; zou, jun; yuan, jiansheng
Tsinghua University, China, People's Republic of

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Digest ID: 391

Application of Improved H-matrices in Micromagnetic Simulations

Ida, Akihiro (1); Ataka, Tadashi (2); Takahashi, Yasuhito (3); Mifune, Takeshi (4); Iwashita, Takeshi (5); Furuya, Atsushi (2)
1: The University of Tokyo; 2: Fujitsu Limited; 3: Doshisha University; 4: Kyoto University; 5: Hokkaido University

PB-A7-10

Digest ID: 392

Data-Driven Model Order Reduction for magnetostatic problem coupled with circuit equations

Pierquin, Antoine (1,2); Henneron, Thomas (1,2); Clénet, Stéphane (1,3)
1: L2EP, France; 2: Univ. Lille; 3: Arts et Métiers Paris Tech

PB-A7-11

Digest ID: 396

A Novel Method for Transmission Line Current Reconstruction in Power Grid

Zhao, Gen (1); Hu, Jun (1); Ouyang, Yong (1); Wang, Zhongxu (1); Wang, Shan Xiang (2); He, Jinliang (1)
1: Tsinghua University, China, People's Republic of; 2: Stanford University, USA

PB-A7-12

Digest ID: 741

Design and Analysis Method of Alternating Rotor Core for Concentrated Flux-Type IPMSM

Jung, Kyung-Tae (1); Jung, Jae-Woo (2); Yoon, Myung-Hwan (1); Hong, Jung-Pyo (1)
1: Hanyang University, Korea, Republic of (South Korea); 2: Hyundai Mobis, Korea, Republic of (South Korea)

PB-A7-13

Digest ID: 417

A Novel Remesh-Free Method based on Finite Element Method for Electromagnetic Devices with Rotation or Translation

Zhang, Xiu (1,2); Zhang, Xin (1,2)
1: Tianjin Normal University, China, People's Republic of; 2: Tianjin Key Laboratory of Wireless Mobile Communication and Wireless Power Transmission, Tianjin Normal University

PB-A7-14

Digest ID: 436

Acoustic Inhomogeneity in Magnetoacoustic tomography with Magnetic Induction based on Split Bregman Methods

Zhang, Shuai; Li, Wenlong; Yang, Hongshuang; Xu, Guizhi
HEBEI UNIVERSITY OF TECHNOLOGY, China, People's Republic of

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Digest ID: 481

An Improved XFEM for Field Analysis of Multilayer HTS Tapes with Multiple Nearby Geometrical Interfaces

Duan, Nana (1); Xu, Weijie (1); Wang, Shuhong (1); Zhu, Jianguo (2)
1: Xi'an Jiaotong University, China, People's Republic of; 2: University of Technology, Sydney, Australia