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**Session Title** [PC-A6] Numerical Techniques 3  
**Date and Time** June 21 (Wednesday) / 14:10-16:00  
**Place** Rm. 103 (1F)  
**Session Chair** Jung Ho Lee (Hanbat Nat'l Univ., Korea)

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**PC-A6-1** **Withdrawn**

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**PC-A6-2** **Digest ID: 72**

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**A Hybrid Parallel Method for 3D Nonlinear Periodic Eddy Current Problems with Motions**

He, Bo; Zhou, Ping; Lu, Chuan  
 Ansys, United States of America

**PC-A6-3** **Digest ID: 312**

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**Stabilized Bordered Block Diagonal Form for Solving Nonlinear Magnetic Field Problems**

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

**PC-A6-4** **Digest ID: 258**

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**Application of the Proper Generalized Decomposition to solve MagnetoElectric Problem**

henneron, thomas (1); clénet, stéphane (2)  
 1: university Lille1, France; 2: Arts et Metiers ParisTech, Lille, France

**PC-A6-5** **Digest ID: 453**

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**An Extended Thin Approximation Method to Simulate Screening Current in REBCO Coils**

Noguchi, So (1,2,3); Miyao, Ryosuke (1)  
 1: Hokkaido University, Japan; 2: National High Magnetic Field Laboratory; 3: Florida State University

**PC-A6-6** **Digest ID: 493**

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**Numerical Approach Using Only Meshless Method for Solving Steady-State Scattering Problems of Electromagnetic Wave**

Saitoh, Ayumu; Takayama, Teruou; Kamitani, Atsushi  
 Yamagata University, Japan

**PC-A6-7** **Digest ID: 497**

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**Highly Accurate Analysis of Magnetic Field by Local-Expansion Edge Element Method with Boundary Surface Integration**

Uchiyama, Takuya (1); Wakayama, Yuki (1); Wakao, Shinji (1); Tokumasu, Tadashi (2); Takahashi, Yasuhito (3); Fujiwara, Koji (3)  
 1: Waseda University, Japan; 2: Toshiba Corporation Infrastructure Systems and Solutions Company, Japan; 3: Doshisha University, Japan

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**PC-A6-8**

**Digest ID: 535**

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**Slip- and High-Frequency Flux Density Separation Method for Rotor Losses Prediction of Induction Motors at Load Conditions**

Zhao, Haisen; Li, Bing; Zhan, Yang; Xu, Guorui  
North China Electric Power University, China, People's Republic of

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**PC-A6-9**

**Digest ID: 600**

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**Transient Finite Element Simulation of Non-Linear Eddy Current Problems with Biot-Savart-Field of Voltage-Driven Coils**

Hollaus, Karl; Schöberl, Joachim; Silm, Haik  
Technische Universität Wien, Austria

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**PC-A6-10**

**Digest ID: 640**

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**3D modeling of magneto-elastic behavior using simplified multi-scale model : application on power transformer core**

Tang, Zuqi (1); Liu, Mingyong (1,2); Bouillault, Frédéric (1); Mininger, Xavier (1); Hubert, Olivier (2)  
1: GeePs – Génie Electrique et Electronique de Paris, France; 2: LMT Cachan, France

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**PC-A6-11**

**Digest ID: 660**

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**Performance of Block IC Preconditioner with Fill-in for Linear Systems Derived from Finite Element Meshes Including Thin Elements**

Tsuburaya, Tomonori (1); Okamoto, Yoshifumi (2); Meng, Zhiqi (1)  
1: Fukuoka University, Japan; 2: Hosei University, Japan

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**PC-A6-12**

**Digest ID: 708**

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**Breakdown Voltage Improvement and Analysis of GaN HEMTs through Field Plate Inclusion and Substrate Removal**

Berzoy, Alberto; Lashway, Christopher; Moradisizkoohi, Hadi; Mohammed, Osama  
Florida International University, United States of America

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**PC-A6-13**

**Digest ID: 716**

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**Approximate Stochastic Model of Geometry Randomness on Interconnect Parasitic in VLSI Circuit**

Yin, Ying (1,2); Xu, Xiaoyu (1,2); Lyu, Pengfei (1,2); Yan, Shuai (1,2); Ren, Zhuoxiang (3)  
1: Institute of Microelectronics of Chinese Academy of Sciences, China, People's Republic of; 2: Beijing Key Laboratory of 3D & Nano IC Electronic Design Automation Technologies, Beijing, China; 3: Sorbonne Universités, UPMC Univ Paris 06, UR2, L2E, Paris

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**PC-A6-14**

**Digest ID: 736**

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**Novel approach for torque calculation of surface-mounted PMSM considering axial end leakage flux**

Jung, Jae-Woo (1); Park, Hyung-Il (1); Hong, Jung-Pyo (2); Lee, Byeong-Hwa (3)  
1: Hyundai Mobis, Korea, Republic of (South Korea); 2: Hanyang University, Korea, Republic of (South Korea); 3: Korea Automotive Technology Institute, Republic of (South Korea)

**PC-A6-15**

**Digest ID: 411**

**Electric Field Computations using Axial Green's Function Method on Refined Axial Lines**

Jo, Junhong (1); Kim, Hong-Kyu (2); KIM, DO WAN (1)

1: Inha University, Korea, Republic of (South Korea); 2: Korea Electrotechnology Research Institute, Korea, Republic of (South Korea)

**PC-A6-16**

**Digest ID: 786**

**Adaptive Sampling of Physical Optics Currents Based on EFIE Error Prediction**

Kim, Jin-Hyeok (1); Chung, Young-Seek (2); Park, Gyu Churl (3); Jung, Hyun-Kyo (1)

1: Seoul National University, Korea, Republic of (South Korea); 2: Kwangwoon University, Seoul, South Korea; 3: Agency for Defense Development, Daejeon, South Korea