



IEEE Nagoya Chapter

Midland Student Express 2017 Autumn

Event of the students, by the students, for the students

1. General Information

Date: 24 November, 2017
 Venue: Kanazawa Institute of Technology
 Bldg. 21, 5th Floor
 7-1 Ohgigaoka, Nonoichi, Ishikawa

Sponsors: IEEE AP-S Nagoya Chapter
 IEEE MTT-S Nagoya Chapter

Technical Co-Sponsors: IEEE Nagoya Section
 IEICE Hokuriku
 Kobokukai of Kanazawa Institute of Technology



2. Committee

General Chairs: Yoshihiko Kuwahara Shizuoka University
 Kenji Itoh Kanazawa Institute of Technology

Secretaries: Yoshitaka Goto Kanazawa University
 Masayoshi Sugino DENSO Corporation

3. Technical Program

9:40-9:45	Opening address by Kenji Itoh, Kanazawa Institute of Technology	
Session 1	Chair: <i>Takuya Tsubota (Kanazawa University)</i> Co-chair: <i>Ken Hirano (Kanazawa Institute of Technology)</i>	
9:45-10:00	S1-1	Study on a high-impedance antenna for sensor network applications -meander dipole antennas- <i>Takuro Yabushita, Kanazawa Institute of Technology</i>
10:00-10:15	S1-2	High-impedance antennas for three bands <i>Takuya Nishio, Kanazawa Institute of Technology</i>
10:15-10:30	S1-3	Fundamental Study on a Folded Inverted-L Antenna <i>Fumiya Osaki, Kanazawa Institute of Technology</i>
10:30-10:40	Short Break	
Session 2	Chair: <i>Hirofumi Segawa (Kanazawa University)</i> Co-chair: <i>Taiki Fukushima (Toyama University)</i>	
10:40-10:55	S2-1	High Efficiency and Broadband Design of Reflectarray Antenna Using Ring Resonator Elements and Measured Results <i>Kento Takeshima, Kanazawa Institute of Technology</i>
10:55-11:10	S2-2	Feasibility Study of MACKKEY type T <i>Ken Hirano, Kanazawa Institute of Technology</i>

11:10-11:25	S2-3	The 900MHz band low power rectenna <i>Ryota Kobuke, Kanazawa Institute of Technology</i>
11:25-11:40	S2-4	Implementation of the planar bridge rectifier with diode array <i>Justin Han, Kanazawa Institute of Technology</i>
11:40-12:45	Lunch	
Session 3	Chair: <i>Takuya Nishio (Kanazawa Institute of Technology)</i> Co-chair: <i>Yuichi Yamawaki (Nagoya Institute of Technology)</i>	
12:45-13:00	S3-1	Analysis of propagation characteristic of MF band radio waves observed by S-310-40 sounding rocket <i>Daiki Oka, Toyama Prefectural University</i>
13:00-13:15	S3-2	Estimation method of lunar surface permittivity using polarization of natural waves observed by scientific satellite <i>Yoshiki Tagawa, Kanazawa University</i>
13:15-13:30	S3-3	Measurement system of RF field distribution using Software-defined radio <i>Takuya Tsubota, Kanazawa University</i>
13:30-13:45	S3-4	Visualization of electromagnetic waves using Mixed Reality technique <i>Hirofumi Segawa, Kanazawa University</i>
13:45-13:55	Short Break	
Session 4	Chair: <i>Shingo Yamaji (Nagoya Institute of Technology)</i> Co-chair: <i>Kento Takeshima (Kanazawa Institute of Technology)</i>	
13:55-14:10	S4-1	A Method of Directivity Measurement for Circular Phased Array 4×4 MIMO Antenna <i>Taiki Fukushima, Toyama University</i>
14:10-14:25	S4-2	A Prediction Method of Radio Propagation Characteristic in Indoor Environments <i>Shunya Kitahara, Toyama University</i>
14:25-14:40	S4-3	Experiment of Wireless Power Transmission Using Dielectric Resonator Rectenna <i>Yuuki Futagi, Toyama University</i>
14:40-14:50	Short break	
Session 5	Chair: <i>Fumiya Osaki (Kanazawa Institute of Technology)</i> Co-chair: <i>Yuuki Futagi (Toyama University)</i>	
14:50-15:05	S5-1	Class E Inverter Protection Circuit Considering Load Fluctuation <i>Keisuke Miyaji, Toyohashi University of Technology</i>
15:05-15:20	S5-2	A Study of Spiral Antenna Using Folded Structure for Coupled-resonant Wireless Power Transfer <i>Kohei Nimura, Nagoya Institute of Technology</i>
15:20-15:35	S5-3	A Study of Reduction of SAR for Wireless Power Transfer of Visual Prosthesis Using Shielded Loop <i>Yuichi Yamawaki, Nagoya Institute of Technology</i>
15:35-15:50	S5-4	A Basic Study on Indoor Wireless Power Transfer Using MIMO Technology <i>Shingo Yamaji, Nagoya Institute of Technology</i>
Special Session (Chair: <i>Keisuke Noguchi, Kanazawa Institute of Technology</i>) 電子情報通信学会北陸支部共催 特別講演会		
16:00-17:00	(招待講演) 人体の電磁界モデリング～安全性評価及び医療への応用～ 平田 晃正 教授 (名古屋工業大学)	
17:00-17:05	Closing address by Yoshihiko Kuwahara, Shizuoka University	
17:30-	Banquet	