



## IEEE Nagoya Chapter

# Midland Student Express 2014 Autumn

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

### 1. General Information

- Date: 28 November, 2014  
 Venue: Toyama University, Faculty of Engineering,  
 Faculty of Engineering Office,  
 2nd Floor, Meeting Hall,  
 Gofuku 3190, Toyama-shi, Toyama.  
 Sponsors: IEEE AP-S Nagoya Chapter  
 IEEE MTT-S Nagoya Chapter  
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### 2. Committee

- General Chairs: Koichi Ogawa Toyama University  
 Jongsuck Bae Nagoya Institute of Technology  
 Secretaries: Mitoshi Fujimoto University of Fukui  
 Toshikazu Sekine Gifu University

### 3. Technical Program

|   |   |  |
|---|---|--|
| 13:00-13:05   | <b>Opening address by Koichi Ogawa, Toyama University</b> |  |
| <b>Session 1</b> (Chair: Masashi Sakai, Gifu University ) |   |  |
| 13:05-13:20   | S1-1  | <b>Analysis of a Top-Loading Monopole Antenna with the Folded Model</b><br><i>Kohei Omote, Toyama University</i>                   |
| 13:20-13:35   | S1-2  | <b>Study on miniaturizing factors of folded inverted-L antennas</b><br><i>Akihiro Tanaka, Kanazawa Institute of Technology</i>     |
| 13:35-13:50   | S1-3  | <b>A Patch Turn-style Antenna with an Increased Radiation in the Low Elevation Angles,</b> <i>Yuta Ishisaka, Toyama University</i> |
| 13:50-14:05   | S1-4  | <b>A high impedance wideband folded-card type antenna</b><br><i>Nao Nambo, Kanazawa Institute of Technology</i>                    |
| 14:05-14:15   | Short Break (1)   |  |

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|---|--|---|
| <b>Session 2</b> (Chair: Kento Karitani, Toyama University )                |  |   |
| 14:15-14:30   | S2-1   | <b>Rectenna for the Energy Harvesting</b><br><i>Takahide Shinagawa, Kanazawa Institute of Technology</i>  |
| 14:30-14:45   | S2-2   | <b>Prototype Development of 1 kW Via-Wheel Power Transfer with Bus Tire Pair,</b> <i>Aoyama Mondo, Toyohashi University of Technology</i>               |
| 14:45-15:00   | S2-3   | <b>Adiabatic principle logic circuits using AC power supply</b><br><i>Masashi Sakai, Gifu University</i>  |
| 15:00-15:20   | Short Break (2)  |   |
| <b>Session 3</b> (Chair: Kohei Omote, Toyama University)                    |  |   |
| 15:20-15:35   | S3-1   | <b>A formulation of the state equations of the circuit based on the modified nodal analysis,</b> <i>Daisuke Saito, Gifu University</i>                  |
| 15:35-15:50   | S3-2   | <b>Measurement method of S-parameters using a jig with unnecessary couplings,</b> <i>Keisuke Takada, Gifu University</i>                                |
| 15:50-16:05   | S3-3   | <b>A 300GHz-band Detector Array for Food Inspection</b><br><i>Xiongbin Yu, Nagoya Institute of Technology</i>   |
| 16:05-16:20   | S3-4   | <b>Synchronization of LED visible light communication system with low-bit-rate CMOS camera,</b> <i>Naoaki Kawagita, Meijo University</i>                |
| 16:20-16:30   | Short break (3)  |   |
| <b>Session 4</b> (Chair: Akihiro Tanaka, Kanazawa Institute of Technology ) |  |   |
| 16:30-16:45   | S4-1   | <b>Throughput Measurement of a Smart Antenna Using the Base Station Simulator,</b> <i>Kento Karitani, Toyama University</i>                             |
| 16:45-17:00   | S4-2   | <b>Combined Antenna Evaluation Considering Uplink and Downlink Channels Using a Bilateral OTA Apparatus,</b> <i>Toshihiko Kabeya, Toyama University</i> |
| 17:00-17:15   | S4-3   | <b>Automatic tracking robot with switched beam antenna and AM receiver</b><br><i>Masashi Izumi, Toyohashi University of Technology</i>                  |
| 17:15-17:20   | <b>Closing address by Jongsuck Bae, Nagoya Institute of Technology</b> |   |
| 17:30-  | Banquet  |   |