



## [WeG1] [Special Session] Innovative MIMO Related Technologies for Future Wireless Communication Systems

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| Date / Time    | Oct. 24 (Wed.), 2018 / 13:00-15:00  |
| Place          | Room G (Sicily Room)  |
| Session Chairs | Kentaro Nishimori (Niigata University, Japan)<br>Qiang Chen (Tohoku University, Jaan) |

### WeG1-1

[Invited Speaker]

13:00-13:40

#### Novel Technologies Using Massive MIMO Transmission toward 5G and its Beyond Systems

Kentaro Nishimori  
*Niigata University, Japan*

### WeG1-2

13:40-14:00

#### Evaluation of Polarization Composite Type Omnidirectional Antenna in Actual Environment

Kota Shishido<sup>1</sup>, Ichiro Oshima<sup>1</sup>, Takayoshi Sasaki<sup>1</sup>, Keisuke Sato<sup>1</sup>, and Kentaro Nishimori<sup>2</sup>  
<sup>1</sup>*Denki Kogyo Co. Ltd., Japan*, <sup>2</sup>*Niigata University, Japan*

### WeG1-3

14:00-14:20

#### Gain Enhancement of 60-GHz SIW Cavity-Backed Slot Array Antenna with Metallic Grooves

Youngtaek Hong and Jaehoon Choi  
*Hanyang University, Korea*

### WeG1-4

14:20-14:40

#### Enabling Full-Duplex MIMO Communication Exploiting Array Antenna Arrangement

Naoki Honma<sup>1</sup>, Shotaro Heianna<sup>1</sup>, Astuto Kawagoe<sup>1</sup>, Shizuka Tada<sup>1</sup>, Yoshiyuki Yamamoto<sup>2</sup>, Qiaowei Yuan<sup>3</sup>,  
and Qiang Chen<sup>2</sup>  
<sup>1</sup>*Iwate University, Japan*, <sup>2</sup>*Tohoku University, Japan*, <sup>3</sup>*National Institute of Technology, Sendai College, Japan*

### WeG1-5

14:40-15:00

#### Real-Time 5G Radio Wave Visualizer

Tetsuro Imai, Minoru Inomata, Koshiro Kitao, and Yukihiro Okumura  
*NTT DOCOMO, INC., Japan*