



2015.7.29
23rd URSI-C Chair
Nobuyoshi Kikuma

Activity Report of URSI-C Committee

- The 2nd scientific workshop of the 23rd URSI-C in Japan -

1. Session title: "Wireless technologies on 5G systems (Part 2: Signal processing and systems)"
2. Convener: Dr. Hidekazu Murata, Kyoto University
3. Date/time: 13:00 - 17:00, July 17th, 2015
4. Venue: Lecture room #4 of Research Bldg. No.8 in Kyoto University at Kyoto city, Kyoto pref.
5. Registration fee: Free
6. Listed attendees: 46 persons
7. Local arrangement: Dr. Koji Yamamoto (Kyoto University)
8. Presentation:
 - 13:00 - 13:10 Opening Remarks, Prof. Nobuyoshi Kikuma, Chair, Commission C of URSI-JNC
 - 13:10 - 14:00 "5G Mobile Communications, its Global Trends and DoCoMo's Approach", Dr. Anass Benjebbour (NTT docomo)
 - 14:00 - 14:50 "User Collaboration using High Frequency Band", Dr. Hidekazu Murata (Kyoto University)
 - 14:50 - 15:10 Coffee Break
 - 15:10 - 16:00 "Overloaded MIMO Transmission Schemes and Their Performance", Dr. Yukitoshi Sanada (Keio University)
 - 16:10 - 16:50 "Full Duplex", Dr. Takashi Watanabe (Osaka University)



9. Reception: Attendance 18 persons at Lecture room #2 of Research Bldg. No.8 in Kyoto University

10. The steering committee meeting took place from 11:45 to 12:45 on July 17th, 2015.

11. Concluding Remarks

With the tremendous growth in wireless data traffic and mobile services, fifth generation (5G) mobile communication systems have gained considerable interest from academia, industry, and standards bodies. In this meeting, we invited four distinguished researchers about 5G related technologies to discuss future possibilities for 5G. The first presentation introduced system concepts and new technologies. In the second presentation, a concept of the user collaboration and its experimental results were given. The third presentation covered signal processing schemes for over-loaded MIMO transmission. The final presentation introduced full duplex wireless communication architecture and its state-of-the-art performance. We had fruitful discussion and obtained valuable information about techniques on 5G systems.

