

July 9, 2013

Activity Report of URSI-F

Reported by Y. Maekawa (Chair)

1. Commission meetings in the period of March – June 2013(For more detail, please see <http://www2.nict.go.jp/pub/ursi-f/>)

(1) No. 572 Meeting

Date: March 8, 2013 Place: NTT Yokosuka R & D Center (Kanagawa)

Three papers were presented:

1. PSAM-based QO-STBC Macro diversity System with Fast Fading Tolerance
2. Ultra-Wideband On-Body Channels within Closed Spaces Depending on Human Population Density
3. MIMO Channel Model and Its Transmission Characteristics

(2) No. 573 Meeting

Date: April 26, 2013 Place: Kanto Gakuin University (Kanagawa)

Three papers were presented:

1. Study of MIMO Channel Capacity Using Difference in Path Length on Antenna Element
2. Characteristics of Time and Direction of Arrival between Mobile Terminals in Residential Area
3. Measurement of Enhanced Backscattering from Randomly Distributed Spherical Conductive Scatterers at 60GHz

(3) No. 574 Meeting

Date: June 13-14, 2013 Place: Kikaishinko-kaikan (Tokyo)

This meeting was held under the co-sponsorship of IEICE Technical Committee on AP, and IEEE AP-S Japan Chapter. Six papers relevant to the field of URSI-F were presented in the special sessions organized for recent propagation issues:

1. Propagation Models for Simulation Scenario of ITS V2V Communications
2. MIMO Channel Property with Movement – Relationship between Spatial Correlation and Capacity –
3. Comparative Evaluation of Space-MIMO and Polarized-MIMO in Urban Small Cell
4. Challenge for Creation of Mobile Radio Channel through Multipath
5. Distribution Characteristics of Incoming Waves under Over-Roof Propagation Environment between Mobile Terminals in Residential Area
6. Experimental Study on Elevation Directional Channel Properties to Evaluate Performance of 3D Beamforming at Base Station in LOS Microcell Environment

For more details, please see: <http://www.ieice.org/cs/ap/jpn/>

(4) No. 575 Meeting

Date: June 27, 2013 Place: The University of Electro-Communications (Tokyo)

Four papers were presented:

1. On the Precursors to the 2011 Japan Earthquake: Earthquake Prediction is Possible?
2. Experimental Study to Consider Effect of Reception Diversity with Maximal Ratio Combining (MRC) in a Prediction Method of Indoor Radio Wave Propagation: Investigating Relation between Recommendation ITU-R P.1238 and Data Measured by MRC Diversity Receiver of the Wireless LAN Access Point Cisco CAP3602E
3. Experimental Study of Mutual Interference between Distributed Wireless Systems in Cognitive Radio
4. Variability of Heavy Rainfall in Tokyo Tech MMW Small-Scale Model Network

2. Others

URSI-F Triennial Open Symposium was held in Ottawa, Canada. Date: Apr.30-May 3, 2013.

Three papers were presented from Japan:

1. Trend of the global rain rate observed by the TRMM precipitation radar
2. A Study on Long-Term Attenuation Statistics in Ka and Ku Band Satellite Communications
3. Ultra-Wideband On-Body Propagation Channels Depending on Population Density within an Elevator Cabin

For more details, please see: <http://ursi-f-ts.com/>

The 4th Asia-Pacific Conference on Synthetic Aperture Radar (APSAR) 2013 will be held in Tsukuba, Japan. Date: Sept. 23-27, 2013. (For more details, please see: <http://www.apsar2013.org/>)