

★宇宙・航行エレクトロニクス研究会 (SANE)

専門委員長 森山敏文 副委員長 田中 真・網嶋 武
幹事 夏秋 嶺・ニッ森俊一 幹事補佐 北村堯之

日時 11月11日(木) 9:00~17:00
12日(金) 9:00~16:30

会場 オンライン開催

議題 ICSANE2021/地下電磁計測ワークショップ

11日午前 Opening ceremony (Zoom A) (9:00~9:10)

Welcome Remarks Toshifumi Moriama (Nagasaki Univ.)

Welcome Remarks Motoyuki Sato (Tohoku Univ.)

SANE Invited session1 (Zoom A) (9:10~10:40)

1. [招待講演] Synthetic Aperture Radar Over Ocean: A Review Kazuo Ouchi (IIS U-Tokyo)
2. [Invited Talk] Adaptive System Identification and Control Theory for Precise Personalized Drug Delivery
Tamer Inanc (Univ. of Louisville, USA)

SANE Invited session2 (Zoom A) (10:40~13:00)

3. [Invited Talk] Development of Airborne Circularly Polarized Synthetic Aperture Radar: Systems and Its Applications
Josaphat Tetuko Sri Sumantyo (Chiba Univ.)
4. [招待講演] Observations of the ionosphere by a GNSS network and application for GNSS-based navigation
Susumu Saito (ENRI, MPAT)

11日午後 GPRWS1 (GPR Plat forms) (Zoom A) (13:00~14:30)

5. Imaging performance of various buried targets under various number of scans with a synthetic aperture radar
○Akihisa Uematsu・Toshiyuki Nishibori (JAXA)
6. Application of RTK-GNSS positioning techniques to GPR measurement
○Ryuma Saito・Motoyuki Sato (Tohoku Univ.)
7. Mysteries from the far-side of the Moon revealed by the Ground penetrating radar onboard Chang' E-4 mission
Chunyu Ding (SUSTech)
8. GPR for Humanitarian Demining in Cambodia and Colombia Motoyuki Sato (Tohoku Univ.)

SANE1 (Zoom A) (14:30~15:40)

9. Theoretical and Experimental Analysis of Terahertz Scattering from Rough Surfaces
○Suyun Wang・Takayoshi Yamada (NICT)・Kun-Shan Chen (Guilin Univ. of Tech.)・Yasuko Kasai (NICT)
10. Scattering and Emission of Multiscale Rough Surface: Modeling and Analysis
○Ying Yang・Kun-Shan Chen (GLUT)
11. Bistatic Scattering Simulation of Oil-Covered Sea Surface and Sensitivity Analysis of Oil thickness
○Tingyu Meng (AIRCAS)・Kun-Shan Chen (Guilin Univ. Tech.)・Xiaofeng Yang (AIRCAS)

SANE2 (Zoom A) (15:40~17:00)

12. Fundamental study on small displacement measurement for human vital signal by FM-CW MIMO radar
○Toshifumi Moriyama・Takaya Higashida (Nagasaki Univ.)
13. An Improved Time Reversal Imaging with a Finite-difference Time-domain Technique
○Chiung-Shen Ku (National Dong Hwa Univ.)・Kun-Shan Chen (Guilin Univ. of Tech.)・Wen-Yen Chang (National Dong Hwa Univ.)
14. Drone-based Millimeter-wave Radar System Using Fiber-optic Technologies
○Haruka Tokunaga・Shota Yamamoto・Yushi Tamenori・Li Yi・Tadao Nagatsuma (Osaka Univ.)
15. A CNN-Based Radar Direction-of-Arrival Estimation from Bistatic Scattering Pattern ○Xiuyi Zhao (Aerospace Information Research Inst., CAS)・Kun-Shan Chen・Ying Yang (Guilin Univ. of Tech.)

11日午後 SANE3 (Zoom B) (13:00~14:10)

16. ヘテロロニアス航空無線システムのためのマルチリンクエミュレータ開発—SWIMへの接続確認—
○森岡和行・呂 曉東・米本成人・河村暁子 (電子航法研)
17. TDOA and AOA Measurement System for Investigating Aircraft Position Verification
○Junichi Naganawa・Hiromi Miyazaki・Hirohisa Tajima・Tadashi Koga・Jun Kitaori (ENRI)
18. Application of passive radar for ocean surface radar Akitsugu Nadai (NICT)

SANE4 (Zoom B) (14:10~15:20)

19. Detection of frost heave using time-series Interferometry SAR data
○Yoon Taek Jung・Sang-Eun Park (Sejong Univ.)

20. Polarimetric analysis of ALOS-2/PALSAR-2 data for grasping state of damaged bridge
○Koki Kuwabara • Ryoichi Sato • Yoshio Yamaguchi • Hiroyoshi Yamada (Niigata Univ.)
21. Monitoring of 2021 Oil Spill Accident off Qingdao Port Using SAR and Optical Satellite Data
○Dae-Woon Shin • Chan-Su Yang (KIOST)
- SANE5 (Zoom B) (15 : 20~16 : 20)**
22. Comparison of change detectors by using satellite polarimetric SAR data
○Xiuting Zhang • Junjun Yin (Univ. of Science and Technology Beijing) • Jian Yang (Tsinghua Univ.)
23. Spaceborne SAR Terrain Matching Framework : Opportunities, Challenges and Strategies
○Yan Wang • Ke Chen (BIT) • Jian Yang (Tsinghua Univ.) • Zhe Li • Xuan Wang • Tianxiao Yang • Zegang Ding (BIT)
24. Design of Modified EBG Structure for WLAN Notch Band Applications ○Saidu Adamu Abubakar • Surajo Alhaji Musa (J.S.I.I.T. Kazaure, Nigeria) • Ibrahim Abba (Sch of Technology, Kano, Nigeria)
- 12 日午前 GPRWS2 (Polarimetric GPR) (Zoom A) (9 : 00~10 : 10)**
1. Detection and Characterization of Ice in Mars Regolith by Polarimetric GPR Onboarded on Chinese? Zhurong? Rover : A Laboratory Experiment
○Hai Liu • Jianhui Li • Yida Tan • Xu Meng (Guangzhou Univ.) • Bin Zhou (CAS)
2. Design and evaluation of a full-polarimetric ground penetrating radar system
○Tomohiro Kondo • Motoyuki Sato (Tohoku Univ.)
3. Progress in data analysis of full Polarimetric GPR Xuan Feng (Jilin University)
- SANE Invited session3 (Zoom A) (10 : 10~12 : 30)**
4. [招待講演] Applications of Electromagnetic Array-Factor for Radar Engineering
Hirokazu Kobayashi (Electromagnetic Wave System Lab.)
5. [Invited Talk] GPM/DPR (TBD) Takuji Kubota (JAXA/EORC)
- 12 日午後 GPRWS3 (Algorithm) (Zoom A) (12 : 30~13 : 40)**
6. 圧縮センシングを拡張するモデルベース一様性地雷検出手法
○今井隆太 • ソン イチェン • 夏秋 嶺 • 廣瀬 明 (東大)
7. Vegetation height estimation : four-stage inversion algorithm for GRVoG-vtd model
○Cheng Xing • Tao Zhang • Hongmiao Wang • Liang Zeng (Tsinghua Univ.) • Junjun Yin (Univ. of Sci. and Tech. Beijing) • Jian Yang (Tsinghua Univ.)
8. シンプルなクロスボアホールレーダモニタリングによる地盤中異常検知と深層学習を用いたフルウェーブ計測結果の解釈 黒田清一郎 (農研機構)
- 12 日午後 SANE6 (Zoom A) (13 : 40~14 : 50)**
9. YOLOv4 Based on Scaled Up Feature Fusion for Rice Fields
○Narendra Babu Tatini • Guan-Yu Lu • Mohammad Alkhaleefah • Yang-Lang Chang (NTUT)
10. Detecting moving ships in ALOS-2 spotlight SAR images by deep learning model Takero Yoshida (TUMSAT)
11. Sub-6 5G モバイル通信システムによるパルス型航空機電波高度計の電磁干渉測定 ニッ森俊一 (電子航法研)
- GPRWS4 (New Application) (Zoom A) (14 : 50~16 : 00)**
12. GPR data processing methods based on extrem gradient boosting algorithm to detect the backfill grouting of shield tunnel Xiongyao Xie • ○Li Zeng • Biao Zhou (Tongji Univ.)
13. Development of a new low frequency GPR system for scanning huge structures
○Anwer Sayed • Motoyuki Sato (CNEAS)
14. Analysis of Lateral wave observed in GPR data ○Tsogtbaatar Amarsaikhan • Motoyuki Sato (Tohoku Univ.)
- YSA Award ceremony (Zoom A) (16 : 00~16 : 20)**
15. YSA Award announcement Toshifumi Moriama (Nagasaki Univ.)
- Closing ceremony (Zoom A) (16 : 20~16 : 30)**
16. Closing remark Makoto Tanaka (Tokai Univ.)
- ◆IEEE AES Society Japan Chapter 共催
- ☆SANE 研究会今後の予定 [] 内発表申込締切日
- 12 月 16 日 (木) 千葉大 [締切済] テーマ : レーダ信号処理, リモートセンシング及び一般
- 2022 年 1 月 18 日 (火), 19 日 (水) 電子航法研 [11 月 9 日 (火)] テーマ : 航法・航空管制及び一般
- 2022 年 2 月 24 日 (木), 25 日 (金) 沖縄産業支援センター [未定] テーマ : 衛星応用技術及び一般
- 【問合先】**
- 夏秋 嶺 (東大)
- TEL [03] 5841-6789

E-mail : natsuaki@eis.t.u-tokyo.ac.jp

ニッ森俊一（電子航法研）

TEL〔0422〕 41-3174

E-mail : futatsumori@mpat.go.jp

◎新型コロナウイルスの感染拡大防止のためオンライン開催に変更となる可能性があります。最新情報は当研究会ホームページも併せて御覧下さい。

<https://www.ieice.org/cs/sane/jpn>