PROGRAMME Day 1 Wednesday 28 November, 2018 — Afternoon (1) —

14:00 to 15:30 PARALLEL SESSION

A1 GNSS Hardware Technology Chair: Stuart Smith, and Ryan Keenan

A1-1 Performance Assessment of a Low Cost Hand Held GNSS Receiver's Raw Code and Carrier Phase Data
*Gerard Lachapelle, Paul Gratton, Jamie Horrelt, Erica Lemieux

A1-2 Joined Estimator for Acquisition of GNSS Primary and Secondary Code with Pre-correlation Coherent Accumulation
*Jiri Svaton, Frantisek Vejrazka

A1-3 GEM series: Robust GNSS logger for Holistic Approach in Extreme Environmental Applications.
Masahiro Asako, Yuka Itoh, Naoko Yoshida, Sabato Falcone, *Dicky Adhitya Dwiantoro

B1 Advanced Application and Future Developments (1) Chair: Hiroyuki Oda, and Bart F.T. Banning

B1-1 Equipment for Conducting Look-out on Maritime Autonomous Surface Ships from the Regulatory Point of View
*Ayako Umeda, Etsuro Shimizu

B1-2 An efficient Information Exchange System for Collision Avoidance between Autonomous Ship and Manned Ship
*Ho Namgung, Jung Sik Jeong, Joo-Sung Kim

B1-3 Real-Time UAV Position and Attitude Estimation Using Multiple GNSS Receivers
*Daichi Inoue, Taro Suzuki, Yoshiharu Amano

C1 Organized Session : Seamanship (1) Chair: Koji Murai

C1-1 Study on Education of Seamanship in the Anchoring Training
*Yoshiaki Kunieda, Koji Murai, Hideyuki Kashima

C1-2 A Method to Provide Weather and Other Information to Make Plans for Fishing Boat Operation.
*Junji Kawasaki, Jun Miyoshi

C1-3 Restructuring PCG: What part did SEAMANSHIP as professionalism play?
*Junji Okuzono, Hiroyuki Matsumoto

C1-4 The Word 'Seamanship' as a Potential Learning Tool for Seaman Education
*Namiko Morishita, Yuji Moro

D1 Integrated Navigation and Algorithm (1) Chair: Tae-Gweon Jeong, and Václav Navrátil

D1-1 An attempt to final classification and explanation of various types of electronic charts and electronic chart systems
*Adam Weintrit

D1-2 Analyzing Efficiency of Nonlinear Filtering Algorithms for Solving Navigational Problems with Polynomial Measurements
*Oleg Andreevich Stepanov, Anton Toropov, Vladimir Vasiliev, Aleksei Loparev, Michael Basin

D1-3 The Performance Analysis of a 6-DOF Integration Scheme for INS/GNSS/LiDAR Navigation System
*Guang-Je Tsai, Kai-Wei Chiang

SessionA; room 301, SessionB; room 302, SessionC; room 303, SessionD; room 304 on 3rd Floor

16:00 to 17:30 PARALLEL SESSION

A2 GNSS Vulnerabilities (1) Chair: Sam Pullen, and Takeyasu Sakai

A2-1 Adoption of TDOA/FDOA Techniques for Assured GNSS Positioning
*Jyh-Ching Juang

A2-2 Design and Implementation of TDMA-based Positioning System Utilizing USRP and GNU Radio
*Won Jae Yoo, Kwang Ho Choi, La Woo Kim, Yu Dam Lee, Hyoungmin So, Hyung Keun Lee

A2-3 Does a GNSS Spoofer Need to Generate all Visible PRNs?
How Sensitive GNSS Signal Authentication Techniques Are in Overlapped Spoofing Scenarios?
*Ali Pirsiavash, Ali Broumandan, Gérard Lachapelle, Kyle O'Keefe

B2 Autonomous Navigation (1) Chair: Hiroyuki Oda, and Youfang Huang

B2-1 Safe Carriage of Cargoes on Unmanned Maritime Autonomous Surface Ships
*Susumu Ota, Megumi Shiokari, Reiko Kikuchi

B2-2 Energy Management Simulation for Autonomous Waterborne People Mover
*Etsuro Shimizu

B2-3 A Study on the Change on the Role of Deck Officer in Maritime Autonomous Surface Ships(MASS) by Analysis of Standards of Competence
*Yoonwon Choi, Ik-Soon Cho

C2 Organized Session : Seamanship (2) Chair: Hirofumi Matsumoto

C2-1 Characteristics of Collision Avoidance Judgment Using Landscape and Radar Information in Simulator-based Experiments
*Yuki Kato, Koji Murai, Tomoya Horiguchi, Namiko Morishita, Masaki Fuchi

C2-2 The Development of Human Reliability Assessment approach: Human Error Assessment and Reductive Technique (HEART) and 4M Overturned Pyramid (MOP) model.
*Ludfi Pratiwi Bowo, Masao Furusho, Wanginingastuti Mutmainnah

C2-3 A combined reactive approach for Markov processes based unmanned ship navigation
*Ruolan Zhang, Masao Furusho, Hongze Liu

C2-4 Actualization of Seamanship Enhancement Based on Evaluation of Mental Workload
*Kenichi Kitamura, Koji Murai, Shin-Ichi Wakida

D2 Integrated Navigation and Algorithm (2) Chair: Héctor Rotstein, and Junji Fukuto

D2-1 Velocity Aided Inertial Navigation for Wellbore Survey
*Matthew Turnowicz

D2-2 Development of Inertial Measurement Unit with Precise Point Positioning of Receiver for Vehicles
*Takehiro Ohnishi, Yutaro Suzuki, Ryo Nakagawa, Kazuhiro Takahashi, Satoru Konishi, Shigehiro Fujii, Keiji Nagatsu, Nobuhiro Kishimoto

D2-3 Map-based Localization Research for Autonomous Vehicle Using Multi-sensor
*Wen-Lin Hsieh, Jyh-Ching Juang, Ching-Fu Lin

SessionA; room 301, SessionB; room 302, SessionC; room 303, SessionD; room 304 on 3rd Floor

	9:00 to 10:30 PARALLEL SESSION
A3	**GNSS Vulnerabilities (2) Chair: Sam Pullen, and Jiwon Seo**
A3-1	Protection of Existing GNSS Signals against Spoofing by Signal Authentication *Dinesh Manandhar, Ryosuke Shibasaki
A3-2	Test Results from GPS Signal Spoofing *Dinesh Manandhar, Ryosuke Shibasaki
A3-3	GNSS Protection 9 Layer Model *Omer Sharar
B3	**Autonomous Navigation (2) Chair: Junji Fukuto, and Jung-Sik Jeong**
B3-1	Ship's Local Trajectory Optimization Considering Maritime Safety Information *Hongze Liu, Masao Furusho, Ruolan Zhang, Xin Wang
B3-2	Sound Recognition for Autonomous and Decision Support System of Boat *Etsuro Shimizu
B3-3	Feasible Assessment of Standard Operation Procedure and Data Collection Process in HD Maps used for Autonomous Vehicle *Jhih Cing Zeng, Pei Ching Hsu, Yu Hua Li, Kai Wei Chiang
C3	**Advanced Application and Future Developments (2) Chair: Bart F.T. Banning, and Ki Yeol Seo**
C3-1	Evolution and industrialization of a SBAS real-time performance monitoring tool (EVORA) *Jiri Doubek, Miroslav Houdek, Daniel Chung
C3-2	Wide Area Augmentation Performance of DFMC SBAS Using Global Monitoring Stations *Mitsunori Kitamura, Takahiro Aso, Takeyasu Sakai
D3	**Indoor and Urban Navigation Chair: Salvatore Gaglione, and Jiří Svatoň**
D3-1	An Integration of GNSS, PDR and BLE for Real-time Seamless Pedestrian Positioning Using Smartphones *Huan Luo, Ya Xin Li, Jun Hua Ye, Li Ta Hsu, Wu Chen
D3-2	Smartphone GNSS Shadow Matching based on Intelligent LOS/NLOS Classifier Haosheng Xu, Guohao Zhang, *Li-Ta Hsu
E3	**Aeronautical / Surface Navigation Chair: Ruri Shoji, and Keisuke Matsunaga**
E3-1	Automating the Process of Determining the Position of the Vessel in Vessel Traffic Systems With the Use of Selected Methods of Robust Estimation *Krzysztof Czaplewski, Mariusz Waz, Marek Zienkiewicz
E3-2	Advanced Weather Routing System for Ships in Actual Seas -Development and Validation by Ship- *Masaru Tsujimoto, Takatoshi Matsuzawa, Naoto Sogihara, Keiichi Hirayama, Yoshihiko Sugimoto, Ken Hasegawa, Kazuo Yokokawa
E3-3	3-dimensional Wind Optimal Trajectory Generation with Updated Meteorological Information *Akinori Harada, Noboru Takeichi, Koichi Oka
F3	**RADAR Technology and Navigation (1) Chair: Tatsuto Yamada, and Héctor Rotstein**
F3-1	A Study on a Speed-dependent Fourth-order Fading Memory Polynomial Filter Tracking a Target with High Maneuverability under the Condition of Own ship's Movement *Tae Gweon Jeong, Bao Feng Pan
F3-2	Automating the process of determining the position of the vessel in Vessel Traffic Systems with the use of selected methods of robust estimation Mariusz Waz, *Krzysztof Czaplewski, Marek Zienkiewicz
F3-3	Study on Detection of People Using 90 GHz Band Millimeter-Wave Rader in Railway Track *Keiichi Takeuchi, Kazuki Nakamura, Nagateru Iwasawa, Nariya Iwaki, Yoshihiro Oozawa, Yusuke Kawamura

11:00 to 12:30 PARALLEL SESSION

A4 GNSS Vulnerabilities (3) / Augmentation Chair: Akio Yasuda, and Sang Hyun Park

A4-1 A Review of GNSS Anomalies, Existing Mitigations, and Extensions to Autonomous Users
*Sam Pullen

A4-2 A SRC-like Signal Scheme and Performance Analysis in S Band
*Jing Ji, Wei Chen, Jiantong Zhang, Hongyang Lu, Jing Li

A4-3 The IGSO SBAS: Augmentation for Arctic Navigation
*Takeyasu Sakai, Mitsunori Kitamura, Takahiro Aso

B4 Education and Training for Navigation (1) Chair: Krzysztof Czaplewski, and Junji Fukuto

B4-1 Three-dimensional Rotation Method to Derive the Spherical Trigonometry Formulas
*Tsunghsuan Hsieh, Jiansen Zhao, Wei Liu, Shengzheng Wang

B4-2 The experience in holding the Conference of Young Scientists "Navigation and Motion Control"
Vladimir Peshekhonov, Oleg Stepanov, *Yulia Litvinenko, Daniil Eliseev, Olga Yashnikova, Ekaterina Stepanova

B4-3 A Study of Education Model for Seafarers of Maritime Autonomous Surface Ships
*Xinyu Bao, Yaotian Fan

C4 eNavigation and Data Communication (1) Chair: Ki Yeol Seo, and Yiengjie Xiao

C4-1 S-Mode as One of the Important Milestones on the Way to the Full Implementation of the e-Navigation Concept
*Adam Weintrit

C4-2 Empirical research on the improvement of usability for navigational instruments - reccomendations based on questionnaire survey results on the near miss cases relate to navigational instruments -
*Yusuke Mori, Masashi Sugomori, Shigeyoshi Yoshimoto, Yasuyuki Hasegawa

C4-3 Empirical research on the improvement of usability for navigational instruments - Recommendations based on questionnaire survey results on the convenience of navigational instruments -
*Yasuyuki Hasegawa, Yusuke Mori, Masashi Sugomori, Shigeyoshi Yoshimoto

D4 Indoor Navigation Chair: Bertrand Merminod, and Nobuaki Kubo

D4-1 The Development of an ANN Embeded Indoor Positioning System for Smartphone Camera
Rui Sun, *Mei-Chin Hung, Yun-Tzu Kuo, Jen-Kai Liao, Kai-Wei Chiang

D4-2 Experimental evaluation of chained synchronization for UWB systems
*Vaclav Navratil, Josef Krska, Frantisek Vejrazka

D4-3 The study of a practical method for indoor localization by mathematical approach
*Yutaka Yamada

E4 Underwater Navigation (1) Chair: Tae-Gweon Jeong, and Yoshinori Miyamoto

E4-1 Underwater Electromagnetic Localization from the Ice Surface
*Hiroshi Yoshida, Ryo Sato, Masaharu Takahashi, Nozomu Ishii, Qiang Chen

E4-2 Landing Point Cointrol of an Underwater Gliding Vehicle for Ocean Floor Resources Exploration
*Satoru Yamaguchi, Hirofumi Sumoto

E4-3 A water tank experimental system for development of autonomous ship collision avoidance
*Keisuke Watanabe, Kazumasa Harada, Koshi Utsunomiya, Masatoshi Shimpo

F4 Intelligent Transport / Navigation System Chair: Hesham Helal, and Chaojian Shi

F4-1 Vehicle Control Center Communication With Campus Autonomous Navigation
*Wei-Ting Chen, Jyh-Ching Juang, Ching-Fu Lin

F4-2 Vessel traffic scheduling optimisation in complex port waters
*Zhang Xinyu

F4-3 Real time North finding Optical sensor, based on a polarized image of the sky
*Shlomi Voro, Sagie Tsadka

14:00 to 15:30 PARALLEL SESSION

A5 Status of Satellite Navigation System Chair: Akio Yasuda, and Ryan Keenan

A5-1 Evaluation of QZSS Resiliency Against Natural Disaster
*Koki Asari

A5-2 Pointing the Microscope on the new Beidou 3 and QZSS Signals
*Steffen Thoelert, Christoph Enneking, Felix Antreich

A5-3 Research and Realization of Intelligent Navigation System Used for Small Vessels based on Mobile Terminal
*Zhu Lian

B5 Education and Training for Navigation (2) Chair: Yiengjie Xiao, and Paweł Zalewski

B5-1 The virtual model of container terminal T2 at DCT Gdańsk
*Piotr Zwolan, Krzysztof Czaplewski

B5-2 About ECDIS Training Scenario Making by Genetic Algorithm
*Hitoi Tamaru, Yoshiaki Kunieda, Naoki Honda, Tomoko Fukuda

C5 eLoran, eNavigation and Data Communication (2) Chair: Adam Weintrit, and Sang Hyun Park

C5-1 Evaluation of an AIS Position Data Compression Method by Dropping Most Significant Bits
*Takahiro Seta, Mitsuru Kobayashi, Yasuyuki Niwa, Hirofumi Matsumoto

C5-2 Development of VDES Simulator and its Application to Evaluate VHF Data Exchange System (VDES) Communication under Protecting AIS Communication
*Ryohei Sawada, Kazuhiko Hasegawa, Kojiro Hata

D5 Urban Navigation Chair: Salvatore Gaglione, and Jiří Svatoň

D5-1 Possibilities of Using Inertial Systems in Navigation
*Slawomir Swierczynski, Krzysztof Czaplewski, Adrian Groman

D5-2 NLOS Multipath Detection by Using Neural Networks
*Yusuke Nakano, Taro Suzuki, Yoshiharu Amano

D5-3 Performance Evaluation of Adaptive Extended Kalman Filter-Based RAIM in Dense Urban Environment
*Takaki Tominaga, Nobuaki Kubo

E5 Underwater Navigation (2) Chair: Hiroshi Yoshida, and Yasuo ARAI

E5-1 AUV navigation near cabled observatory at coastal waters using acoustic communication system
*Hayato Kondo

E5-2 Measurement system for the detailed fish navigation in limited sea area
*Toyoki Sasakura, Keiichi Uchida, Yoshinari Miyamoto

F5 Sensor Based Navigation Chair: Héctor Rotstein, and Osamu Amai

F5-1 Train position detection and calculation system by means of use of inertial sensors together with a tachometer generator
*Koji Iwata, Takayasu Kitano, Shigeru Taniguchi, Yuki Ota, Masayuki Kitora, Shota Saiki, Akira Asano

F5-2 Navigation Grade Chip-Scale Low CSWAP 6 DoF MEMS IMU
*Louis Ross, Robert Mark Boysel

SessionA; room 301, SessionB; room 302, SessionC; room 303, SessionD; room 304 on 3rd Floor
SessionE; room104, SessionF; room105 on 1st Floor

9:00 to 10:30 PARALLEL SESSION

A6 Augmentation Service Reports of QZSS (1) Chair: Sam Pullen, and Hiromune Namie

A6-1 Performance of Precise Point Positioning via Magellan Systems Japan Receiver
*Yutaro Suzuki, Takehiro Ohnishi, Toru Kondo, Naoko Tokonami, Satoshi Negami, Toshinobu Nagamastu, Keiji Nagatsu, Noburiho Kishimoto

A6-2 Performance Evaluation of the CLAS Wide-area RTK Service
Andrew Simsky, Frank Boon, Bruno Bougard, Rui Hirokawa, *Ryan Keenan

A6-3 Performance Evaluation of CLAS and PPP Using Correction Data via QZSS
*So Takahashi, Haoyan Zhang, Nobuaki Kubo

B6 Education and Training for Navigation (3) Chair: Krzysztof Czaplewski, and Simon Gaskin

B6-1 A Convergent Application of Multiple Concepts to Teaching English for Specific Purposes
*Kenji Tanaka

B6-2 Supporting seafarer and family well-being in the face of traumatic events: A before, during and after model
*Alexander Dimitrevich

C6 RADAR Technology and Navigation (2) Chair: Tae-Gweon Jeong, and Yoshinori Miyamoto

C6-1 A Study of high collision risk Area by OZT using AIS data in Tokyo Bay
*Mikihisa Ishii, Ruri Shoji

C6-2 A study on a new risk assessment of ship traffic environment
*Akihiro Tsukisaka, Tatsuto Yamada, Ruri Shoji, Shinji Mizui

C6-3 Evaluation of Navigational Fusion System between ARPA and AIS
*Shigeyuki Okuda, Yoshifumi Ichikawa, Yasuo Arai, Masatoshi Shimpo

D6 Risk & Safety Evaluation (1) Chair: Osamu Amai, and Martin Bransby

D6-1 Understanding of Seafarers' Behavioral Error by Hidden Markov Models
- Focused on the Behavioral Errors in Ship Collision -
*Jeong-Bin Yim, Deuk-Jin Park, Chun-Kee Lee, Min-Jung Kim

D6-2 Sensor Fusion-Based Collision Avoidance System for Steering Control of Autonomous Vehicles
*Ching-Fu Lin, Jyh-Ching Juang

E6 Integrated Navigation and Algorithm (3) Chair: Jung-Sik Jeong, and Václav Navrátil

E6-1 An improved gravitation field based particle filter algorithm and its application in PPP GPS/INS integration
*Zhang Chuang

E6-2 Features of the federated filter methods in the navigation data processing
*Yulia Litvinenko, Victor Tupysev

E6-3 The Investigation of Multi-Sensor Fusion Schemes to Facilitate Navigation Safety for Autonomous Driving
*Rui Sun, Kai-Wei Chiang, Washington Yotto Ochieng

F6 Technology / Green Navigation / Time, Frequency Chair: Adam Weintrit, and Takayuki Yoshihara

F6-1 The Development of Vehicle Attitudes Simulation System for Autonomous Vehicle Navigation Control System.
Masahiro Asako, Katsushi Chida, *Naoko Yoshida, Sabato Falcone, Dicky Adhitya Dwiantoro

F6-2 Analysis of ship emission in ECAs based on AIS Data
*Xinjia Gao, Qiang Zhang, Chun Yang, Qinyou Hu, Chaojian Shi

F6-3 Different Clock Steering Techniques: Comparision between Simulation und Realization
*Johann Furthner, Tobias D Schmidt, Marion Goedel

11:00 to 12:30 PARALLEL SESSION

A7 Augmentation Service Reports of QZSS (2) Chair: Nobuaki Kubo, and Ryan Keenan

A7-1 Prospect for global positioning augmentation service by MADOCA
*Yoshikatsu Iotake

A7-2 Evaluation of Precise Point Positioning of Small UAVs using L6E Signal via QZSS
*Taro Suzuki

A7-3 Indoor and Outdoor Detection for Smart Phone using QZSS
*Takamasa Kawaguchi, Nobuaki Kubo

B7 Precise Positioning (1) Chair: Salvatore Gaglione, and Takayuki Yoshihara

B7-1 Triple frequency partial ambiguity resolution for multi-GNSS long baseline RTK
*Yize Zhang, Nobuaki Kubo

B7-2 New Method to Retrieve Millimeter Class Displacment from RTK/PPP-RTK Measurement Data
*Izumi Mikami, Masayuki Saito

B7-3 General Theory of GNSS Positioning with GR Models and Kalman Filters
*Sueo Sugimoto

C7 Marine Navigation (1) Chair: Hisayuki Kurokawa, and Stuart Smith

C7-1 A new positioning system for Maritime
*Martin Bransby

C7-2 Advanced GM Measuring System using Plural VI-GNNSs Receivers
*Masatoshi Shimpo, Keisuke Wanatabe, Shigeyuki Okuda, Yoshifumi Ichikawa, Kozaburo Yamada, Yasuo Arai

D7 Risk & Safety Evaluation (2) Chair: Krzysztof Czaplewski, and Ruri Shoji

D7-1 A Purpose-Oriented Technique for Route Planning of Ships based on the Concept of Risk Isoline Curves
*Mingi Jeong, Eun-Bang Lee, Moonjin Lee

D7-2 Accident analysis of liquefied natural gas carriers
*Junichi Kudou, Tomohiro Yuzui

D7-3 A Study on the Proposal for Probability of Exceedance for the Berthing Velocity by Measured Data Analysis
*Sangwon Lee, Jang-Won Cho, Ik-Soon Cho

E7 Integrated Navigation and Algorithm (4) Chair: Sang Hyun Park, and Yasuo ARAI

E7-1 The Design and Implementation of AIS Messages Decoding Algorithm for Multi-core CPU
*Zeng Xiangkun

E7-2 Performance Evaluation of Alternative Radio Navigation System in Navigation Warfare Environment Using Message Broker based M&S S/W Design Method
*Heyone Kim, Junhak Lee, Sang Heon Oh, Hyoungmin So, Dong-Hwan Hwang

SessionA; room 301, SessionB; room 302, SessionC; room 303, SessionD; room 304 on 3rd Floor
SessionE; room104, SessionF; room105 on 1st Floor

14:00 to 15:30 PARALLEL SESSION

A8 Atmosphere and Space Weather Chair: Jiwon Seo, and Keisuke Matsunaga

A8-1 GNSS-based real-time ionospheric 3-D tomography over Japan and its application to GNSS augmentation
*Susumu Saito, Mamoru Yamamoto, Akinori Saito, Chia-Hun Chen

A8-2 Possibility of improving ionospheric tomography by the strategy of grid construction
*Jieqing Yu, Wenyue Wang, Kefei Zhang

A8-3 Statistical analysis of tropospheric delay differences between two GNSS stations separated by a few kilometers
*Takayuki Yoshihara, Susumu Saito, Atsushi Kezuka, Shinji Saitoh

B8 Precise Positioning (2) Chair: Ki Yeol Seo, and Yasuo ARAI

B8-1 The Development of L6 Adapter for Quasi-Zenith Satellite System (QZSS) Centimeter Level Augmentation Service(CLAS)
*Masayuki Saito, Koki Asari, Izumi Mikami

B8-2 Improving Accuracy of Single-Frequency RTK-GNSS using Satellite Selection and Doppler Frequency
*Natsuka Shimizu, Yoshiharu Amano, Taro Suzuki

B8-3 A Star Structure Algorithm Based on VRS/CORS and Experimental Analysis
*Zhu Chao

C8 Marine Navigation (2) Chair: Martin Bransby, and Adam Weintrit

C8-1 Examination of the Visualization Design for Remotely Ship Maneuvering
*Su Yan, Ruri Shoji, Takahiro Takemoto, Tadasuke Furuya, Kohta Oshima, Etsuro Shimizu

C8-2 Unaided Dynamic Inertial Alignment: A Comparison of Techniques
*Matthew Turnowicz, Keith Vickery

C8-3 Study on Estimation of Ship Resistance Onboard Using 3D VI-GNSS Receiver
*Yoshifumi Ichikawa

D8 Trafic Control / Risk & Safety Evaluation (3) Chair: Hesham Helal, and Chaojian Shi

D8-1 Analysis of Cognitive Processes of Operators of Vessel Traffic Service
*Binbing Song , Hiroko Itoh, Yasumi Kawamura, Junji Fukuto

D8-2 Restoring Ship Trajectory From AIS Data: A Case Study In Yangtze River, China
*Zhonglian Jiang, Cheng Zhong, Xiumin Chu, Lei Liu

D8-3 Evaluation of the Collision Risk using GIS in Tokyo Bay
*Makiko Minami, Ruri Shoji

SessionA; room 301, SessionB; room 302, SessionC; room 303, SessionD; room 304 on 3rd Floor

PROGRAMME Day 1	**Wednesday**	**28 November, 2018**	**13:30 -- 16:00**
PROGRAMME Day 2	**Thursday**	**29 November, 2018**	**09:00 -- 16:00**
PROGRAMME Day 3	**Friday**	**30 November, 2018**	**09:00 -- 15:30**

Poster Session opens during above in the International Conference Room on 2nd Floor.

Authors' presentation will be held on following schedule.

28-Nov 15:30 to 16:00	**POSTER SESSION presentations**	**Chair: Martin Bransby**
P1-1	Predicting Vessel Trajectories Based on AIS Data and Recurrent Neural Network *Liangbin Zhao, Guoyou Shi	
P1-2	Prediction of Ship Destinations in Harbor Area using Maritime Traffic Data with Deep Learning Technique *Kwang Il Kim, Jung Sik Jeong	
29-Nov 10:30 to 11:00	**POSTER SESSION presentations**	**Chair: Chaojian Shi**
P2-1	An Experiment on Rapid Ambiguity Resolution for RTK-GNSS by the Optimum Satellites Combination for Double Phase Difference *Hiromune Namie	
P2-2	A Study on State Estimation with Multiple GNSS Antennas and a Low-cost IMU Using Double and Triple Differences of Carrier Phase *Kotaro Fujii, Takateru Urakubo, Eiji Itoh	
29-Nov 15:30 to 16:00	**POSTER SESSION presentations**	**Chair: Yasuo ARAI**
P3-1	eNodeB Selection Algorithm for LTE-based Positioning *Taewon Kang, Jiwon Seo	
P3-2	A Study on Estimation of the Receivable Area of AIS Radio Waves via Mountain Diffraction Propagation *Atsushi Yamamoto, Masaaki Yamanaka	
30-Nov 10:30 to 11:00	**POSTER SESSION presentations**	**Chair: Jiří Svatoň**
P4-1	Managing system and method of fishing gear using automatic identification device *Namsoo Kim, Gyungtae Nam, Younggeun Lee, Jeejoong Hwang	
P4-2	On the Nowcast of Swells Based on Observation in Toyama Wan *Masashi Kawai	