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Front Matter: Volume 7651

, "Front Matter: Volume 7651," Proc. SPIE 7651, International Conference on Space Information Technology 2009, 765101 (2 April 2010); doi: 10.1117/12.862352

SPIE.

Event: International Conference on Space Information Technology 2009, 2009, Beijing, China

PROCEEDINGS OF SPIE

International Conference on Space Information Technology 2009

**Xingrui Ma
Baohua Yang
Ming Li**
Editors

**26–27 November 2009
Beijing, China**

Organized by
Space Star Technology Company, Ltd. (China)

Sponsored by
China Academy of Space Technology (China)

Cosponsored by
The Second Academy of China Aerospace Science and Industry Corporation (China)
Huazhong University of Science and Technology (China)

Published by
SPIE

Volume 7651

Proceedings of SPIE, 0277-786X, v. 7651

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Author(s), "Title of Paper," in *International Conference on Space Information Technology 2009*, edited by Xingrui Ma, Baohua Yang, Ming Li, Proceedings of SPIE Vol. 7651 (SPIE, Bellingham, WA, 2010) Article CID Number.

ISSN 0277-786X

ISBN 9780819480798

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time) • Fax +1 360 647 1445

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Contents

Part One

xv	Conference Committee
xix	Introduction

DEEP SPACE EXPLORATION AND COMMUNICATION TECHNOLOGY/ACQUISITION, PROCESSING, AND APPLICATION TECHNOLOGY OF SPACE INFORMATION

7651 02	ML-IKE: a multi-layer IKE protocol for TCP performance enhancement in wireless networks [7651-60] Y.-H. Zhang, B.-W. Cheng, Space Star Technology Co., Ltd. (China) and Peking Univ. (China); S.-H. Qing, Peking Univ. (China); G.-N. Zou, Space Star Technology Co., Ltd. (China); W.-P. Wen, Peking Univ. (China)
7651 03	A WebGIS system on the base of spatial data processing system for land application [7651-13] D. Wu, Q. Wang, H. Wang, Z. Wang, Southeast Univ. (China)
7651 04	A 2D vector map watermarking algorithm resistant to simplification attack [7651-66] C. Wang, Wuhan Univ. (China) and Shihezi Univ. (China); B. Liang, Q. Zhao, Z. Qiu, Shihezi Univ. (China); Y. Peng, L. Yu, Wuhan Univ. (China)
7651 05	Australian fire monitoring and assessment using CCD and IRS data of HJ-1-A/B [7651-166] S. Liu, S. Yang, National Disaster Reduction Ctr. of China (China)
7651 06	Research on imaging algorithm of target detection based on BD signals [7651-167] J. Yang, W. Liang, J. Wang, L. Yu, National Key Lab. of Science and Technology on C4ISR (China)
7651 07	Study on the spectrum reconstruction and relative radiometric calibration of interference imaging spectrometer [7651-122] L. Yao, W. Zhao, S. Fan, Space Star Technology Co., Ltd. (China)
7651 08	The scheme of LLSST based on inter-satellite link for planet gravity field measurement in deep-space mission [7651-68] Y. Yang, X. Li, L. Liu, Univ. of Electronic Science and Technology of China (China)
7651 09	Satellite image compression based on fractal theory [7651-95] Y. Zhou, P. Liu, Y. Huang, China Academy of Space Technology (China)
7651 0A	The method of low-orbit satellite ambiguity fixing on network RTK [7651-111] S. Pan, Q. Wang, S. Wang, F. Ke, Southeast Univ. (China)
7651 0B	Monte Carlo simulation method of atmosphere-ocean laser transmission [7651-48] Y. Dong, C. Li, R. Huang, Huazhong Univ. of Science and Technology (China)

- 7651 OC **Simulation of space-based optical surveillance visible image** [7651-53]
H. Sun, Y. Han, Y. Li, Academy of Equipment Command & Technology (China)
- 7651 OD **Research on space object active detection ladar system imaging simulation** [7651-58]
H. Sun, Y. Han, Academy of Equipment Command & Technology (China)
- 7651 OE **Tropospheric zenith delay monitoring in GPS precise point positioning** [7651-34]
Q. Zhu, Z. Wu, Xidian Univ. (China); Z. Zhao, China Research Institute of Radio Wave Propagation (China)
- 7651 OF **Development tendency and key technology of deep space exploration's sample return capsule** [7651-171]
Z. Xing, H. Zhao, B. Wen, Beijing Institute of Spacecraft System Engineering (China)
- 7651 OG **A method for classification training samples spatial-time expanding of remote sensing image** [7651-07]
G. Ren, Ocean Univ. of China (China) and First Institute of Oceanography (China); J. Zhang, Y. Ma, First Institute of Oceanography (China) and Key Lab. of Marine Science and Numerical Modeling (China); R. Zheng, Ocean Univ. of China (China)
- 7651 OH **An automatic registration method for different temporal remote sensing images based on improved Fourier-Mellin algorithm** [7651-03]
R. Li, Henan Univ. (China) and Institute of Geographical Sciences and Natural Resources Research (China); J. Sun, F. Yin, Institute of Geographical Sciences and Natural Resources Research (China); F. Guo, Institute of Automation (China); W. Wang, Henan Univ. (China) and Institute of Geographical Sciences and Natural Resources Research (China)
- 7651 OI **An image fusion method based on wavelet transform and ICM** [7651-92]
H. Wang, M. Li, Y. Li, K. Zhang, Northwestern Polytechnical Univ. (China)
- 7651 OJ **A modified cadastral survey system based on GPS/PDA** [7651-110]
H. Wang, Q. Wang, X. Wu, Southeast Univ. (China)
- 7651 OK **The study on the synthesis approximate algorithm of GPS height conversion** [7651-33]
X. Wu, Q. Wang, B. Gao, H. Liang, Southeast Univ. (China)
- 7651 OL **Design of the automatic landing inversion flight control system based on neural network compensation for UAV** [7651-91]
Y. Chen, W. Yang, Northwestern Polytechnical Univ. (China)
- 7651 OM **Image fusion algorithm based on energy of Laplacian and PCNN** [7651-132]
M. Li, Northwestern Polytechnical Univ. (China) and Xi'an Shiyong Univ. (China); H. Wang, Y. Li, K. Zhang, Northwestern Polytechnical Univ. (China)
- 7651 ON **Automatic target tracking in infrared image sequences using ensemble distance metric** [7651-59]
Z. Wang, G. Yang, North China Electric Power Univ. (China)
- 7651 OO **A method of phase estimation for sinusoid signal based on correlation algorithm** [7651-38]
X. Chang, X. Zhang, Q. Zhang, Beijing Univ. of Aeronautics and Astronautics (China)

- 7651 OP **A study on two-level network monitoring system for space exploration** [7651-121]
Y. Ding, K. Hu, L. Chen, Beihang Univ. (China)
- 7651 OQ **Bit assignment optimization for ROI of CCSDS image compression standards based on DWT** [7651-73]
J. Zhang, H. Zhao, J. Ma, Y. Cui, Harbin Institute of Technology (China)
- 7651 OR **Development of assistant and decision-making system of site selection for supermarket based on MapX** [7651-123]
S.-D. Wang, J.-H. Cheng, X. Ma, Henan Polytechnic Univ. (China)
- 7651 OS **An improved FFT acquisition method for weak signal in deep-space communications** [7651-54]
X. Pan, Beijing Institute of Technology (China); M. Chen, Beijing Research Institute of Telemetry (China)
- 7651 OT **A method of content-based image analysis using SVM classifier in data catalogue and archive system of remote sensing satellite** [7651-102]
X. Wang, S. Fan, Space Star Technology Co., Ltd. (China)
- 7651 OU **SAR image segmentation based on the two-dimensional Pseudo Wigner-Ville Distribution** [7651-56]
C. Liu, Y. Li, K. Zhang, Northwestern Polytechnical Univ. (China)
- 7651 OV **Satellite antenna layout and optimization in electromagnetic compatibility design** [7651-142]
J. Zhang, S. Xie, Y. Liu, Beijing Univ. of Aeronautics and Astronautics (China)
- 7651 OW **Search for random fluctuations in periods of Cepheids** [7651-148]
L. N. Berdnikov, Sternberg Astronomical Institute (Russian Federation); I. R. Stevens, The Univ. of Birmingham (United Kingdom)
- 7651 OX **How human resource organization can enhance space information acquisition and processing: the experience of the VENESAT-1 ground segment** [7651-126]
R. Acevedo, The Bolivarian Agency for Space Activities (Venezuela); N. Orihuela, Central Univ. of Venezuela (Venezuela); R. Blanco, The Bolivarian Agency for Space Activities (Venezuela); F. Varela, Beihang Univ. (China) and Central Univ. of Venezuela (Venezuela); E. Camacho, M. Urbina, L. G. Aponte, L. Vallenilla, L. Acuña, R. Becerra, T. Tabare, E. Recaredo, The Bolivarian Agency for Space Activities (Venezuela)
- 7651 OY **Application of rough set theory in geodesic data processing** [7651-109]
S. Gu, Huazhong Univ. of Science and Technology (China) and Beijing Aerospace Control Ctr. (China); J. Wei, Huazhong Univ. of Science and Technology (China); J. Guo, Beijing Aerospace Control Ctr. (China)
- 7651 OZ **Effective spatial database support for acquiring spatial information from remote sensing images** [7651-31]
P. Jin, S. Wan, L. Yue, Univ. of Science and Technology of China (China)

- 7651 10 **Discussion on spatio-temporal data model of mining-land use change** [7651-84]
C. Liu, Henan Polytechnic Univ. (China); H. Zhang, Luoyang Institute of Science and Technology (China); S. Wang, Henan Polytechnic Univ. (China)

SATELLITE COMMUNICATION TECHNOLOGY/SATELLITE APPLICATION TECHNOLOGY

- 7651 11 **Design and implementation of 800Mbps 16-QAM pulse shaping filter in high speed satellite transmission** [7651-23]
J. Hu, Ctr. for Space Science and Applied Research (China) and Graduate Univ. of the Chinese Academy of Sciences (China); X. Cheng, W. Xiong, X. Chen, Ctr. for Space Science and Applied Research (China)
- 7651 12 **The development and inspiration of space-based information system** [7651-168]
W. Liang, Z. Duan Mu, J. Gao, National Key Lab. of Science and Technology on C4ISR (China)
- 7651 13 **Study on outgoing longwave radiation variations associated with strong earthquake** [7651-144]
F. Jing, Institute of Remote Sensing Applications (China), Graduate Univ. of the Chinese Academy of Sciences (China), and Institute of Earthquake Science (China); X. Gu, Institute of Remote Sensing Applications (China); X. Shen, Institute of Earthquake Science (China)
- 7651 14 **An air traffic flow management method based on mixed genetic algorithms** [7651-174]
Y. Fu, Air Force Equipment Academy (China)
- 7651 15 **A Ku band circularly polarized U-slot antenna** [7651-146]
L. Han, N. Liu, Space Star Technology Co., Ltd. (China)
- 7651 16 **Analysis of effect of electromagnetic interference on detection data from the data transmitting system of the electromagnetic satellite** [7651-24]
R. Yan, Institute of Engineering Mechanics (China) and Institute of Crustal Dynamics (China); J.-F. Zhang, Institute of Crustal Dynamics (China); Y. An, P.-L. Wang, Y.-R. Liu, Academy of Opto-Electronics (China)
- 7651 17 **Mitigating congestion in wireless ad hoc networks by using a potential-based routing algorithm** [7651-16]
W. Wu, Z. Zhang, D. Qin, C. He, Harbin Institute of Technology (China)
- 7651 18 **Performance of M-ary spread spectrum communication system present in multipath** [7651-120]
B. Wang, Space Star Technology Co., Ltd. (China); L. Zhang, Univ. of Science and Technology Beijing (China)
- 7651 19 **Research on synthetic decision support technology based on data farming** [7651-30]
H. Shi, Z. Yu, W. Li, Northwestern Polytechnical Univ. (China)
- 7651 1A **Dynamic network management and service integration for airborne network** [7651-76]
W. Pan, W. Li, Northwestern Polytechnical Univ. (China)

- 7651 1B **An adaptive detection model of moving dim targets based on energy difference between frames** [7651-114]
Y. Liu, Nanchang Institute of Technology (China); G. Yan, Huazhong Univ. of Science and Technology (China)
- 7651 1C **Research of STBC in free space optical communications system** [7651-41]
T. Deng, K. Peng, Y. Lu, Huazhong Univ. of Science and Technology (China)
- 7651 1D **High efficiency and dual polarized array antenna for satellite communication application** [7651-152]
N. Liu, Space Star Technology Co., Ltd. (China)
- 7651 1E **Numerical simulation of thermal effects on a 2m space telescope** [7651-09]
Y. Gong, F. Zhao, L. Zhang, H. Xiang, Beijing Technology and Business Univ. (China); P. Wang, Beijing Institute of Technology (China)
- 7651 1F **Unscented Kalman filter with open-loop compensation for high dynamic GNSS carrier tracking** [7651-19]
W. Wang, X. Chen, S. Han, W. Meng, Harbin Institute of Technology (China); Y. Zhang, Space Star Technology Co., Ltd. (China)
- 7651 1G **An FPGA-based DS-CDMA multiuser demodulator employing adaptive multistage parallel interference cancellation** [7651-15]
X. Li, Z. Song, Y. Zhan, Q. Wu, Space Star Technology Co., Ltd. (China) and Beijing Institute of Technology (China)
- 7651 1H **An efficient decoding for low density parity check codes** [7651-02]
L. Zhao, X. Zhang, M. Zhu, Beijing Univ. of Aeronautics and Astronautics (China)
- 7651 1I **Interoperation between AODV protocol and AOHR protocol for mobile ad hoc networks** [7651-125]
S. Wu, C. Wang, J. Zhang, Harbin Institute of Technology (China)
- 7651 1J **Max-min energy-aware hybrid routing protocol for ad hoc networks** [7651-124]
S. Wu, C. Wang, X. Bai, Harbin Institute of Technology (China)
- 7651 1K **Enhanced reliable transmission control protocol for spatial information networks** [7651-74]
Z. Qin, J. Zhang, J. Wang, Sichuan Univ. (China)
- 7651 1L **Intrusion tolerant model for spatial information networks based on defense-in-depth** [7651-67]
J. Zhang, Z. Qin, J. Wang, Sichuan Univ. (China)
- 7651 1M **Comparison of two MAC protocols based on LEO satellite networks** [7651-170]
M. Guan, R. Wang, Shenzhen Institute of Information Technology (China)
- 7651 1N **The atmospheric conditions of the Maidanak Observatory in Uzbekistan for ground-based observations** [7651-137]
S. Ilyasov, Y. Tillayev, Ulugh Beg Astronomical Institute (Uzbekistan)

- 7651 1O **Space based remote sensing applications for archaeology** [7651-139]
M. B. Rajani, Indian Institute of Science, Bangalore (India)
- 7651 1P **A pricing scheme to maximize social welfare in communication networks** [7651-130]
J. Estévez, H. G. Xiong, Q. Gao, E. Guerrero, Beijing Univ. of Aeronautics and Astronautics (China)
- 7651 1Q **Research on carrier noise ratio calculation method in satellite communication link** [7651-163]
M. Zhu, C. Zhang, S. Min, Space Star Technology Co., Ltd. (China)
- 7651 1R **A novel feature link quality analysis method applied in satellite adaptive frequency hopping communication** [7651-89]
D. Wu, B. Wang, Z. Han, C. Xiao, Space Star Technology Co., Ltd. (China)
- 7651 1S **Method to calculate bandwidth of VLF transmitting antenna based on MSK power spectrum** [7651-21]
Y.-H. Dong, G.-Q. Jin, Naval Univ. of Engineering (China)
- 7651 1T **Precise relative positioning of formation of spacecraft using GPS** [7651-177]
Z. Liang, T. Ju, Space Star Technology Co., Ltd. (China)
- 7651 1U **Remote sensing satellite data integration and service technology** [7651-96]
Y. Lee, F. Wang, X. Lee, Z. Shi, X. Zhou, Space Star Technology Co., Ltd. (China)
- 7651 1V **Study on resource management algorithm based on infinitesimal perturbation analysis for communication networks** [7651-140]
Y. Song, Jilin Normal Univ. (China); Z. Zhang, Changchun Teachers College (China); N. He, Institute of Equipment and Command Technology (China) and People's Liberation Army (China)
- 7651 1W **A novel circularly polarized, broad band, wide beam microstrip patch antenna for navigation terminal applications** [7651-22]
T. Dong, China Academy of Space Technology (China); Y. Chen, Beijing Institute of Technology (China)
- 7651 1X **An improved super-exponential algorithm for blind equalization of satellite SIMO communication systems** [7651-117]
D. Wu, B. Wang, W. Gao, W. Tan, Space Star Technology Co., Ltd. (China)
- 7651 1Y **A 3D model retrieval approach based on Bayesian networks lightfield descriptor** [7651-39]
Q. Xiao, Y. Li, Northwestern Polytechnical Univ. (China)
- 7651 1Z **GPS-based attitude determination using adaptive multiple model** [7651-50]
D. Zhen, S. Knedlik, O. Loffeld, Univ. of Siegen (Germany)
- 7651 20 **FDSAC-SPICE: fault diagnosis software for analog circuit based on SPICE simulation** [7651-162]
Y. Cao, East China Jiaotong Univ. (China); Z. Cen, J. Wei, Huazhong Univ. of Science and Technology (China)

- 7651 21 **Design of a general portable communication signal simulator** [7651-176]
Q. Zhu, X. Ruan, G. Jin, S. Li, Naval Univ. of Engineering (China)
- 7651 22 **High speed and bi-mode image compression core for onboard space application** [7651-25]
H. Wang, J. Chen, Ctr. for Space Science and Applied Research (China) and Graduate Univ. of the Chinese Academy of Sciences (China); X. Gu, X. Chen, Ctr. for Space Science and Applied Research (China)
- 7651 23 **A novel high-gain wide-band omnidirectional antenna for satellite communication application** [7651-153]
Y. Wang, Space Star Technology Co., Ltd. (China)
- 7651 24 **Application and research of multi-thread technology in spaceborne SAR imaging** [7651-86]
L. Tian, S. Fan, W. Zhao, Beijing Institute of Satellite Information Engineering (China)
- 7651 25 **A new corner detection method based on differential code** [7651-116]
S. Wu, X. Yu, M. Xu, Institute of Surveying and Mapping, Information Engineering Univ. (China)
- 7651 26 **Development and application prospects of modern small satellite technology** [7651-70]
Y. Wang, Meteorology and Hydrology Bureau of GSD (China); Y. Huang, PLA Univ. of Science and Technology (China)

Part Two

SATELLITE NAVIGATION AND CONTROL TECHNOLOGY/EARTH OBSERVATION TECHNOLOGY BY SATELLITES

- 7651 27 **High-gain integral dynamic compensation robust control for a satellite with mobile body** [7651-82]
Z. Zhang, Beijing Institute of Control Engineering (China) and National Lab. of Space Intelligent Control (China); J. Hu, Beijing Institute of Control Engineering (China)
- 7651 28 **Design of a delay/Doppler mapping receiver for GPS remote sensing** [7651-04]
W. Li, D. Yang, Beihang Univ. (China); M. Zhang, Space Star Technology Co., Ltd. (China); Q. Zhang, Beihang Univ. (China)
- 7651 29 **Method of designing GNSS continuously operating reference station network and selecting station place** [7651-71]
F. Ke, Q. Wang, S. Pan, Southeast Univ. (China)
- 7651 2A **Partial search for multi-carrier GNSS ambiguity resolution** [7651-06]
X. Zhao, Q. Wang, S. Pan, Y. Zhao, Southeast Univ. (China) and European-Asian Educational & Application Development Ctr. of Galileo (China)
- 7651 2B **Implementation and verification of an advancement to the Galileo system search and rescue service signal simulator** [7651-97]
M. Lin, Space Star Technology Co., Ltd. (China); Q. Wu, Beijing Institute of Technology (China); S. Liu, Space Star Technology Co., Ltd. (China)

- 7651 2C **Cooperative acquisition algorithms for new GNSS signals** [7651-77]
S. Han, Q. Wan, W. Wang, W. Meng, Harbin Institute of Technology (China); Y. Zhang, Space Star Technology Co., Ltd. (China)
- 7651 2D **FFT-based L1 C/A and L2C combined acquisition techniques** [7651-28]
S. Han, R. Ma, W. Wang, W. Meng, Harbin Institute of Technology (China); Y. Zhang, Space Star Technology Co., Ltd. (China)
- 7651 2E **Analysis and validation for the compatibility of GPS and Galileo signals** [7651-20]
S. Zhang, T. Ju, China Academy of Space Technology (China)
- 7651 2F **Enhancement of satellite VLBI tracking system with capability of correlator model parameters prediction** [7651-37]
F. Shu, Y. Yu, W. Zheng, X. Zhang, Shanghai Astronomical Observatory (China)
- 7651 2G **Research on the disposition of reference station for SBAS in China** [7651-147]
S. Gao, R. Li, Z. Huang, L. Luo, Beihang Univ. (China)
- 7651 2H **Algorithm of multi-path signals restraining of BD receiver based on cepstral** [7651-169]
J. Wang, W. Liang, J. Yu, J. Yang, National Key Lab. of Science and Technology on C4ISR (China)
- 7651 2I **An efficient algorithm for autonomous orbit determination of navigation constellation based on cross-link range** [7651-44]
H. Li, H. Wang, B. Xu, Nanjing Univ. of Aeronautics and Astronautics (China)
- 7651 2J **Research on long-term autonomous orbit determination for navigation constellation using inter-satellite orientation observation information** [7651-43]
B. Li, B. Xu, H. Wang, Nanjing Univ. of Aeronautics and Astronautics (China)
- 7651 2K **Design method of a baffle of the large-FOV optical system with 2D scan mirror** [7651-85]
X. L. Li, H. Liu, X. P. Li, Y. T. Pei, Shanghai Institute of Technical Physics (China)
- 7651 2L **Design of hardware correlator for BOC(1,1) baseband signal** [7651-65]
D. Yang, W. Li, X. Liu, Y. Feng, Beihang Univ. (China)
- 7651 2M **Anti-aliasing filter design on spaceborne digital receiver** [7651-87]
D. Yu, C. Zhao, National Key Lab. of Science and Technology on Millimeter Wave System (China)
- 7651 2N **The research of high accuracy autonomous navigation in the satellite orbit maneuver** [7651-104]
L. Wang, Z. Wang, Northwestern Polytechnical Univ. (China)
- 7651 2O **A new autonomous celestial navigation method based on UKF and MPF** [7651-93]
F. Xu, Beijing Aerospace Automatic Control Institute (China)
- 7651 2P **Fixed-point auto-landing algorithm for UAV based on point tracking** [7651-108]
Z. Shao, Beijing Institute of Technology (China); Z. Nie, Beihang Univ. (China); Y. Feng, S. Feng, Beijing Institute of Technology (China)

- 7651 2Q **Relative geometric projection method and argument rotation algorithm for compensation part of an image navigation and registration system** [7651-46]
Y. Ning, Z. Wang, W. Li, Northwestern Polytechnical Univ. (China)
- 7651 2R **A low power wide bandwidth CMOS folded-cascode amplifier** [7651-115]
J. Sun, X. Zhang, Beijing Univ. of Aeronautics and Astronautics (China)
- 7651 2S **The evaluation methods of sampling rate performance in GNSS receiver** [7651-55]
T. Ke, X. Hu, Y. Liu, Y. Ran, Huazhong Univ. of Science and Technology (China)
- 7651 2T **Design and implementation of the correlator used for high dynamic satellite receivers** [7651-35]
Q. Zhang, X. Zhang, X. Chang, P. Gong, Beijing Univ. of Aeronautics and Astronautics (China)
- 7651 2U **A GPS based autonomous attitude determination and nonlinear adaptive robustness controller design for spacecraft** [7651-113]
Y. Fan, Y. Han, Nanjing Univ. of Aeronautics and Astronautics (China); C. Zhou, People's Liberation Army (China)
- 7651 2V **Vision aided inertial navigation for autonomous pinpoint planetary landing** [7651-45]
J. Feng, P. Cui, H. Cui, Harbin Institute of Technology (China)
- 7651 2W **The mobile LBS positioning solution based on NRTK and Windows Mobile** [7651-98]
Z. Liao, X. Duan, J. Lu, X. Yue, W. Liu, Q. He, Changsha Univ. of Science and Technology (China)
- 7651 2X **The theory and application of the SSDM methodology for solving the deformation information at single epoch by GPS technique** [7651-94]
X. Yu, W. Lü, Anhui Univ. of Science and Technology (China); S. Xu, Wuhan Univ. (China)
- 7651 2Y **A smart broadband satellite system with elastic capacity** [7651-69]
S. Feng, Q. Feng, Y. Lin, G. Li, PLA Univ. of Science and Technology (China)
- 7651 33 **Torque compensation technology for the geostationary meteorological satellite** [7651-107]
Z. Wang, L. Wang, S. Chen, Northwestern Polytechnical Univ. (China); Q. Li, Shanghai Academy of Spaceflight Technology (China)

SATELLITE SYSTEM AND SYSTEM ENGINEERING TECHNOLOGY

- 7651 34 **An efficient algorithm for encoding and decoding of raptor codes over the binary erasure channel** [7651-64]
Y.-H. Zhang, B.-W. Cheng, Space Star Technology Co., Ltd. (China) and Peking Univ. (China); G. Zou, Space Star Technology Co., Ltd. (China); W.-P. Wen, S.-H. Qing, Peking Univ. (China)
- 7651 35 **Study on method of autonomous orbit determination of navigation satellites based on least-square collocation** [7651-112]
W. Liu, X. Gong, Z. Li, F. Wang, Wuhan Univ. (China)

- 7651 36 **Application of virtual method in thermal vacuum test of satellite paraboloid antenna** [7651-18]
Q. Dou, H. Pang, China Academy of Space Technology (China); Z. Cao, Beijing Institute of Satellite Environment (China); C. Wei, China Academy of Space Technology (China)
- 7651 37 **Research and embedded implementation of Layer 3 switch** [7651-158]
J. Song, Z. Cheng, Space Star Technology Co., Ltd. (China)
- 7651 38 **Application of infrared lamp array in the thermal balance test of SINOSAT-2** [7651-99]
S. Liu, Beijing Univ. of Aeronautics and Astronautics (China); Y. Pei, Beijing Institute of Spacecraft Environment Engineering (China); L. Sun, Beijing Univ. of Aeronautics and Astronautics (China)
- 7651 39 **The study on integrated mode of inter-satellite communication/measurement in autonomous formation flyer** [7651-78]
X. Li, L. Liu, Y. Yang, Univ. of Electronic Science and Technology of China (China)
- 7651 3A **Analysis for scattering of plasma sheath of aircraft by ZT-FDTD method in three-dimensional space** [7651-17]
Y. Yang, Z. Wei, M. Fang, G. Chen, Z. Zhang, Nanjing Univ. of Aeronautics and Astronautics (China)
- 7651 3B **Discussion on spacecraft local area networks** [7651-175]
W. Zheng, Z. Cheng, J. Liu, Beijing Institute of Satellite Information Engineering (China); H. Jiang, K. Hu, Beihang Univ. (China)
- 7651 3C **A method for the orbit determination accuracy improvement of a station with a limited motion antenna** [7651-154]
F. Wu, Graduate Univ. of the Chinese Academy of Sciences (China), National Time Service Ctr. (China), and Beijing Aerospace Control Ctr. (China); J. Liu, Y. Liu, Y. Li, P. Zhu, L. Du, Beijing Aerospace Control Ctr. (China)
- 7651 3D **Optimization of regional navigation satellite constellation by improved NSGA-II algorithm** [7651-47]
H. Chang, X. Hu, Y. Zhang, Y. Zeng, Y. Wang, Huazhong Univ. of Science and Technology (China)
- 7651 3E **Compensating method for splitter in multi-channel off-axis three-mirror optical system with large field and small F number** [7651-62]
H. Lui, X. Li, Y. Pei, Shanghai Institute of Technical Physics (China)
- 7651 3F **Simulation of echoes for the design of precipitation radar** [7651-88]
W. Xiang, D. Yu, National Key Lab. of Science and Technology on Millimeter Wave System (China); Z. Ge, China Aerospace and Industry Corp. (China)
- 7651 3G **Scheme of disaster monitoring competence configured for Chinese space system** [7651-165]
Y. Huang, P. Liu, Y. Hou, Y. Fan, Y. Zhou, China Academy of Space Technology (China)
- 7651 3H **A novel on-board switch scheme based on OFDM** [7651-83]
J. Dang, P. Zhou, Z. Cao, Tsinghua Univ. (China)

- 7651 3I **The application of spread-spectrum system in the area of remote space exploration** [7651-156]
F. Wang, X. Wang, China Academy of Space Technology (China) and Space Star Technology Co., Ltd. (China)
- 7651 3J **Development of a FPGA&DSP-based experimental GNSS receiver platform** [7651-151]
Y. Hu, Q. Zhang, D. Yang, Beihang Univ. (China)
- 7651 3K **Denoising of ECG signal during spaceflight using singular value decomposition** [7651-103]
Z. Li, L. Wang, China Academy of Space Technology (China)
- 7651 3L **Solar activity and space weather changes** [7651-101]
A. A. Hady, Cairo Univ. (Egypt)
- 7651 3M **The ring problem of (N+1) bodies: ten years of research (1999–2009)** [7651-138]
T. Kalvouridis, National Technical Univ. of Athens (Greece)
- 7651 3N **Research on remote synchronization system for onboard crystal oscillators of quasi-zenith satellite system** [7651-136]
T. Iwata, National Institute of Advanced Industrial Science and Technology (Japan)
- 7651 3O **Solar power satellites: our next generation of satellites will deliver the sun's energy to Earth** [7651-143]
D. M. Flounoy, Ohio Univ. (United States)
- 7651 3P **Space-based solar power generation using a distributed network of satellites and methods for efficient space power transmission** [7651-51]
R. M. McLinko, B. V. Sagar, Massachusetts Institute of Technology (United States)
- 7651 3Q **Aerospace concurrent engineering: a modern global approach** [7651-80]
M. Imbert, X. Li, Beijing Univ. of Aeronautics and Astronautics (China)
- 7651 3R **Design and implementation of spatial situation simulation system based on STK** [7651-159]
Z. Chen, Wuhan Univ. (China); Y. Meng, J. Mao, Second Artillery Command College (China)
- 7651 3S **A real-time fault diagnosis method of SACS based on combination of offline identification and online observing** [7651-119]
Z. Cen, J. Wei, R. Jiang, X. Liu, Huazhong Univ. of Science and Technology (China)
- 7651 3U **A distributed MDO architecture and its application on small satellite** [7651-36]
Z. You, G. Li, J. Fu, Tsinghua Univ. (China)
- 7651 3V **Application and implementation of 1553B protocol and CCSDS protocol in the precipitation radar** [7651-90]
Z. Li, D. Yu, National Key Lab. of Science and Technology on Millimeter Wave System (China)
- 7651 3W **Development of a software-based IF GPS signal simulator** [7651-106]
Y. Hu, D. Yang, Y. Zhang, Q. Zhang, Beihang Univ. (China)

Author Index

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- 1 Satellite System and System Engineering Technology
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Wolfgang Kainz, University of Vienna (Austria)

- 3 Satellite Communication Technology/Satellite Application Technology
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Paolo Villoresi, Università degli Studi di Padova (Italy)
- 4 Deep Space Exploration and Communication Technology/Space
Information Acquisition, Processing and Application Technology
Peijian Ye, China Academy of Space Technology (China)
Zongchuang Liang, China Academy of Space Technology (China)
Martin C. E. Huber, European Space Agency (France)
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Introduction

Humankind never gives up their efforts in exploring, developing, and utilizing space. Research and practice have been carried out by generation after generation. Getting rid of the constraints of Earth, humans can observe the Earth from space and understand it from the view of space information. The combination and penetration of modern space technology and information science and technology create new space information science and technology.

With the continuous progress of global space technology and the coming era of space economy, space information technology develops quickly with various new theories and techniques. Space information technology, based on the core technologies of remote sensing, geographical information system (GIS), and global navigation satellite system and satellite communication, is the most important way for information transmission and quick acquisition of the dynamic Earth status of large areas and position information.

Based on the satellite Earth observation, people begin to observe the Earth continuously. Through the information processing which fast reappears and objectively reflects the Earth surface status, phenomena, process, spatial distribution and position. By realizing the global communication with satellite in different ways, space information technology has rendered service to every aspect of national economy construction and social development. Space information technology has become one of the three pioneer scientific areas of the world, in parallel with nanotechnology and biological technology.

Currently, space information technology is quickly applied to the traditional industries. It plays an increasingly important role in the information system reformation in the field of agriculture, urban and regional planning management, transportation, business, and traditional manufacturing, as well as in national macro planning, management, decision-making and social services. The space information high-tech industry has become the pioneer and important part of the information industry. With the rapid development and mutual combination of space technology and its related advanced technologies, space information technology is sure to evolve into a new focus in the future.

Space information technology is highly comprehensive and synthetic, which requires the close collaboration among the institutions of payload development, satellite manufacture and launch, satellite data receiving and processing, and application. The China Aerospace Science and Technology Corporation, as the backbone of China's space technology research, is dedicated to launch vehicles, satellite and spin-off, all of which have close relationship with space information technology. This technology covers all the phases of space information acquisition, transmission, processing and application. In order to

enhance satellite application, satellite ground operation service, information technology and other business, the Satellite Application Academy has been established this year, whose aim is to utilize the research outcomes of space technology for sustainable development of national economy and the society, and to promote the research and application of space information technology in China.

The China Aerospace Science and Technology Corporation will always welcome all the experts and friends. We expect your visit to CASC for information exchange and cooperation. I believe all our friends at this conference will make joint efforts with us to contribute to the development of space information technology.

Xingrui Ma