

**International Conference on Astronautics and Space
Exploration 2022
(iCASE2022)**

10/31/2022

November 03~05, 2022

2022 年國際太空探索研討會 2022 年 11 月 03-05 日

**International Conference Hall &
Building of Science College
National Cheng Kung University (NCKU), Tainan, Taiwan**
國際會議廳 (光復校區)、理學教學大樓 (成功校區)
國立成功大學(臺南市東區大學路 1 號)

2022/11/03 Thursday		
Venue: International Conference Hall, National Cheng Kung University (NCKU)		
08:30 - 17:00	Registration (International Conference Hall Lobby)	
09:00 - 17:00	Poster (Multifunction Room)	
Venue	1st Lecture Room	
09:00 - 10:30	S1L1 International Conference on GPS Radio Occultation, ICGPSRO Chair: Shu-Chih Yang & Cheng-Yung Huang	
10:30 - 11:00	Coffee Break	
11:00 - 11:45	Keynote Speech Dr. Shinichi Nakasuka (WebEx) New wave of space development and utilizations driven by micro/nano-satellites - Recent Japanese activities from education to business Chair: Shiann-Jeng Yu	
11:45 - 12:30	Keynote Speech Dr. Charles Lin Space Environmental Hazards to Space Technology Chair: Shiann-Jeng Yu	
12:30 - 13:30	Lunch (Multifunction Room)	
Venue	1st Lecture Room	2nd Lecture Room
13:30 - 15:00	S2L1 Spacecraft Bus and Payload Instrument Chair: Tien-Chuan Kuo	S3L2 Triton Mission and Applications Chair: Wen-Hao Yeh & Yung-Fu Tsai
15:00 - 15:30	Coffee Break	
15:30 - 17:00	S4L1 Image and Science Data Processing Chair: Li-Hsueh Chang & Tee-Ann Teo	S5L2 Satellite Communication Applications/ Interstellar Mission Orbit Maneuvering and Deep Space Exploration Chair: Loren Chang & Ming-Yuan Yeh
17:00 - 17:30	TSIDA general assembly	
18:00 -	Banquet Shangri-La (臺南遠東香格里拉)B2., No. 89, Sec. W., Daxue Rd., East Dist., Tainan City	

2022/11/04 Friday

Venue: Building of Science College &
International Conference Hall, National Cheng Kung University (NCKU)

09:00 - 17:30	Registration (1F Building of Science College)		
09:30 - 17:30	Poster & Exhibit (1F Building of Science College)		
Venue	Room 36102, Building of Science College		
09:30 - 09:45	2022 TSU Annual Meeting and Satellite Science Workshop & iCASE Joint Opening Master of ceremonies: Charles Lin		
09:45 - 09:55	Group photo		
09:55 - 10:25	Keynote Speech Dr. Jong-Shinn Wu 國家太空計畫未來之展望與規劃 Chair: Charles Lin		
10:25 - 10:40	Keynote Speech Dr. Wing-Huen Ip 臺灣太空科學聯盟之進展與前景 Chair: Charles Lin		
10:40 - 10:55	Coffee Break		
10:55 - 11:25	低軌道衛星的新時代 Dr. I-Kang Fu Chair: Charles Lin		
11:25 - 11:40	大學太空發展：中央大學太空科學與科技研究中心之規劃與展望 Dr. Jann-Yenq Liu Chair: Charles Lin		
11:40 - 11:55	大學太空發展：成功大學太空科學與工程發展現況 Dr. Alfred Bing-Chih Chen Chair: Charles Lin		
11:55 - 13:00	Lunch		
Venue	QFort Meeting Room 2F, Building of Science College	Conference Room 36567 5F, Building of Science College	3rd Lecture Room International Conference Hall
13:00 - 14:30		S9MA Forum Space law and policy governance Chair: Jill Chou	S8L3 Space Radiation Testing Workshop
14:30 - 15:00	Coffee Break		Coffee Break 14:30 - 14:45
15:00 - 16:30	S6Q2 FORMOSAT-5 Mission Achievement Chair: Chi-Kung Chao & Shian-Jing Liu	S9MB Forum Space industry 15:00 - 16:00 Chair: Feng-Tai Hwang Break 16:00 - 16:15	S8L3 Space Radiation Testing Workshop
16:30 - 17:30	S7Q2 Sounding Rocket and Small Launchers Chair: Shih-Sin Wei & Yao Chung Hsu	S9MC Forum Talent cultivation 16:15 - 17:30 Chair: Feng-Tai Hwang	
17:30 - 18:00	Refreshment (1F Building of Science College)		

2022/11/05 Saturday

Venue: Building of Science College, National Cheng Kung University (NCKU)

08:30 - 13:00	Registration (1F Building of Science College)		
09:00 - 15:30	Exhibit (1F Building of Science College)		
Venue	Room 36173	Venue	Room 36102
09:00 - 10:30	The 4th CubeSat Mission Design CONTEST & The 8th Mission Idea Contest Taiwan Preliminary	08:40 - 09:50	接軌世界—國際太空合作 (TSU/iCASE Joint Session) Loren Chang & Jill Chou
10:30 - 11:00	Coffee Break	09:50 - 11:00	軌道衛星發展與應用 (TSU/iCASE Joint Session) Jung-Huang Liao / Vicky Chu
11:00 - 12:15	The 4th CubeSat Mission Design CONTEST & The 8th Mission Idea Contest Taiwan Preliminary	11:10 - 12:10	參展廠商介紹與展示 (TSU/iCASE Joint Session) Alfred Bing-Chih Chen & Jui-Chung Chang
12:15 - 13:00	Lunch		
13:00 - 15:00	Student Paper Contest	13:00 - 14:10	關鍵技術與酬載研發 (TSU/iCASE Joint Session) Charles Lin & Yung-Fu Tsai
15:00 - 15:30	Coffee Break	14:00 - 15:20	人才培育- 太空科技系所與學程 (TSU/iCASE Joint Session) Alfred Bing-Chih Chen & Shui-Lin Weng
15:30 - 16:00	Wrap-up & Award Ceremony Venue: Room 36173		

Day One - 2021/11/03 (Thursday)

S1L1 International Conference on GPS Radio

Occultation, ICGPSRO

International Conference Hall - 1st Lecture Room

09:00 - 10:30		S1L1 International Conference on GPS Radio Occultation, ICGPSRO	
Invited	09:00 - 09:15	Assimilation of FORMOSAT-7_COSMIC-2 GNSS Radio Occultation Data at Central Weather Bureau	Guo-Yuan Lien
RO-02	09:15 - 09:30	Typhoon Simulations with GNSS RO Data in hybrid 3DnVar Assimilation Systems	Shu-Ya Chen
RO-03	09:30 - 09:45	Exciting New Findings of Earth Ionosphere from three year observations of FORMOSAT7-COSMIC2	Charles Lin
RO-04	09:45 - 10:00	The equatorial plasma bubbles observed by high-density GNSS network and FORMOSAT-7 Beacon over Taiwan and Philippines	Tung Yuan Hsiao
RO-05	10:00 - 10:15	Assimilation of multi-satellite observations into Global Ionospheric Specification	Chi-Yen Lin
RO-06	10:15 - 10:30	The Impact of Equatorial Plasma Bubble on Radio Occultation	Shih-Ping Chen

S2L1 Spacecraft Bus and Payload Instrument

International Conference Hall - 1st Lecture Room

13:30 - 15:00		S2L1 Spacecraft Bus and Payload Instrument	
SBP-01	13:00 - 13:20	The Preliminary Design of Scintillation and IONosphere eXtended - SCION-X - A 12U CubeSat for Ionospheric and Atmospheric Science	Yu-Shun Wang
SBP-02	13:20 - 13:40	Lesson learned from IRIS-A Deployable Solar Panel	Tzu-Chiao Lin
SBP-03	13:40 - 14:00	A Microcontroller-Based Magnetometer Design	Wen-Chi Lu
SBP-04	14:00 - 14:20	A 6U CubeSat project with a high resolution remote sensing instrument - ONGLAISAT	Bandy Shang

S3L2 Triton Mission and Applications

International Conference Hall – 2nd Lecture Room

13:30 - 15:00		S3L2 Triton Mission and Applications	
TMA-01	13:00 - 13:15	Current Status of Triton Mission and GNSS-R Instrument	Yung-Fu Tsai
TMA-02	13:15 - 13:30	On the Development of the TRITON Level 1 Calibration Algorithm	EN-YIH LIU
TMA-03	13:30 - 13:45	Retrieving sea surface wind speed through GNSS-R signal using one-step and two-steps geophysical model function	Lin Zhang
TMA-04	13:45 - 15:00	Introduction of NSPO segment in Triton Science Data processing	Wen-Hao Yeh
TMA-05	15:00 - 15:15	Ocean Wind Speed Estimation Based on GNSS Reflectometry and Deep Learning	YI-TING CHOU
TMA-06	15:15 - 15:30	Impact of assimilating the GNSS-R sea surface wind on tropical cyclone prediction	Shu-Chih Yang

S4L1 Image and Science Data Processing

International Conference Hall – 1st Lecture Room

1530 - 17:00		S4L1 Image and Science Data Processing	
ISP-01	15:30 - 15:50	Study of Satellite Image Contrast Degradation Caused by Atmospheric Effect Using Radiative Transfer Code, 6SV	LI-YU CHANG
ISP-02	15:50 - 16:10	Exchanges of satellite images by the blockchain encryption system with data security transmission and cloud management platform	LI-WU CHEN
ISP -03	16:10 - 16:30	Accelerated Super Resolution Processing for Formosat-8 Image	YU-LIN TSAI
ISP-04	16:35 - 16:50	Image Ortho-rectification for FORMOSAT Optical Satellite Imagery using Deep-learning-based Image Matching	Bo-Yi Lin

**S5L2 Satellite Communication Applications/
Interstellar Mission Orbit Maneuvering and Deep
Space Exploration**

International Conference Hall – 2nd Lecture Room

15:30 - 17:00		S5L2 Satellite Communication Applications/ Interstellar Mission Orbit Maneuvering and Deep Space Exploration	
SI-01	15:30 - 15:55	Dynamic Modelling and Attitude Control of Satellite with Single-wing and Dual-axis Solar Panel Configuration	PEI-CING CHEN
SI-02	15:55 - 16:20	The Deep Space Radiation Probe: Development of a First Lunar Science Payload for Space Environment Studies and Capacity Building	Loren C. Chang
SI-03	16:20 - 16:45	A Compact X-band Transmitter for Satellite Communication Applications	SHU-CHAO HSIEH

Day Two - 2021/11/04 (Friday)

S6Q2 FORMOSAT-5 Mission Achievement

2F, Building of Science College – QFort Meeting Room

15:00 - 16:30		S6Q2 FORMOSAT-5 Mission Achievement	
F5-01	15:00 - 15:15	Lessons learned from FORMOSAT-5	Cynthia Liu
F5-02	15:15 - 15:30	Banana Plantation Monitoring by the Integration of Multi-Sensor and Multi-Temporal Satellite Images with Data Cube for Central America	YUN-PING WANG
F5-03	15:30 - 15:45	Remote Sensing Images Integration for Disaster Response Using Taiwan Data Cube Service Platform	TZU-YIN CHANG
F5-04	15:45 - 16:00	Advanced Ionospheric Probe onboard FORMOSAT-5 Satellite	Chi-Kuang Chao
F5-05	16:00 - 16:15	Magnetic Conjugate Property in a Density Irregularity Structure With Large Latitudinal Extent Observed by FORMOSAT-5 at 720 km Altitude	Shin-Yi Su
F5-06	16:15 - 16:30	Pre-earthquake ionospheric anomalies and ionospheric storms observed by FORMOSAT-5\AIP	Yun-Cheng, Wen

S7Q2 Sounding Rocket and Small Launchers

2F, Building of Science College – QFort Meeting Room

16:30 - 17:30		S7Q2 Sounding Rocket and Small Launchers	
SRL-01	16:30 - 16:50	Performance of a Low-Pressure Engine under Blow-Down Type Pressurized System	張之信
SRL-02	16:50 - 17:10	HTTP-3A S2 Rocket Testing Campaign	Zuo-Ren Chen
SRL-03	17:10 - 17:30	Regression Rate Study of Various Fuels in Hybrid Rocket	JYUN-YU JHANG

S8L3 Space Radiation Testing Workshop

International Conference Hall – 3rd Lecture Room

13:00 - 16:25		S8L3 Space Radiation Testing Workshop	
Keynote Speech	13:30 - 14:30	Effect of space radiation on advanced semiconductor devices	Cher-Ming Tan
SRT-02	14:45 - 15:10	DOSIMETRY SYSTEM FOR TOTAL IONIZATION TESTING	Tsi-Chian Chao
SRT-03	15:10 - 15:35	A radiation hardened triple-module-redundancy comparator circuit using a short-pulse laser for radiation testing	Chun-Hao Liang
SRT-04	15:35 - 16:00	The Tolerance of Helium Ion Irradiation Damage in High Entropy Alloy	Kuan-Che Lan
SRT-05	16:00 - 16:25	General practices of radiation test for space applications	Chih-Hsun Lin

Program Forum

5F, Building of Science College – Room 36567

- **S9MA Forum: Space law and policy governance**

Chairperson (主持人): Jill Chou (周巧盈)

Speakers (與談人):

- 許智翔 國防安全研究院
- 鄭子真 文化大學
- 李修瑩 工研院
- 張家銘 東吳大學

- **S9MB Forum: Space industry**

Chairperson (主持人): Feng-Tai Hwang (黃楓台)

Speakers (與談人):

- 王人龍 台灣產物保險
- 詹英文 NSPO
- 呂珮如 工研院

- **S9MC Forum: Talent cultivation**

Chairperson (主持人): Feng-Tai Hwang (黃楓台)

Speakers (與談人):

- 李奕德博士 氣象局
- 陳賢容 太空事務青年人才
- 周徽徽 太空事務青年人才
- 周巧盈 NSPO

13:00 – 14:30		S9MA Space law and policy governance	
FOR-01	13:00 - 13:20	Trends of the development of US Space Technologies and Industries (美國太空科技與產業發展趨勢)	Jyh-Shyang Sheu
FOR-02	13:20 - 13:40	咫尺光年:日本太空法制化發展與趨勢 (The development and trend of Japan's space legalization)	Tzuchen Cheng
FOR-03	13:40 - 14:00	South Korea's Strategic Layout in Response to the New Space Age (韓國因應新太空時代之策略布局)	HSIU-YING LEE
FOR-04	14:00 - 14:20	Integration and Development- A Preliminary Study on Space Technology and Industry in Central European Countries (整合與發展 - 東歐國家太空科技與產業初探)	Chia-Ming Chang
	14:20 - 14:30	QA & Conclusion	Jill Chou

15:00 – 16:00		S9MB Forum: Space industry	
FOR-06	15:15 - 15:30	Trends of the development of US Space Technologies and Industries (美國太空科技與產業發展趨勢)	Ying-Wen Jan
	15:45 - 16:00	QA & Conclusion	Feng-Tai Hwang

16:15 – 17:30		S9MC Forum : Talent cultivation	
FOR-08	16:15 - 16:30	Trends of the development of US Space Technologies and Industries (美國太空科技與產業發展趨勢)	I-TE LEE
FOR-09	16:30 - 16:45	SPACE, from NASA to Everyone	Hsien-Jung Chen
FOR-10	16:45 – 17:00	Asia-Pacific Undergraduate CubeSat Initiative to Promote Interdisciplinary Collaboration in Higher Education	Hui-Hui Chou
FOR-11	17:00 - 17:15	How does Taiwan Participate in APRSAF via Space Education?	Chiao-Ying Chou
	17:15 - 17:30	QA & Conclusion	Feng-Tai Hwang

Day Three - 2021/11/05 (Saturday)

The 4th CubeSat Mission Design CONTEST & The 8th

Mission Idea Contest Taiwan Preliminary

1F, Building of Science College – Room 36173

0900 - 10:30		The 4th CubeSat Mission Design CONTEST & The 8th Mission Idea Contest Taiwan Preliminary (I)	
CMD-01	09:00 - 09:15	Aqua mission based on Mars Gravity Research for tracking the movement of potential water	Wei-Lin Liao
CMD-02	09:15 - 09:30	The Mission Concept and System Definition of Neutral Air Density In-situ Research - NADIR - A 6U CubeSat Constellation	Yu-Shun Wang
CMD-03	09:30 - 09:45	Using Satellite Salaxies to Detect Earthquake Precursors	楊予綸
CMD-04	09:45 - 10:00	Black Hole Image Using VLBI Technology with CubeSat Formation	CHAO-YUAN LEE
CMD-05	10:00 - 10:15	National Central University X-ray Virtual Telescope Cubesat Experiment	Tong Wang
CMD-06	10:15 - 10:30	Synthetic Aperture Radar on the CubeSat to monitoring the surface variation	BO-YU CHIEN

11:00 - 12:15		The 4th CubeSat Mission Design CONTEST & The 8th Mission Idea Contest Taiwan Preliminary (II)	
CMD-07	11:00 - 11:15	Investigating Black Hole Radiation Characteristics with Space Aperture Synthesis Radio Telescope	TSUNG-HSUAN YU
CMD-08	11:15 - 11:30	Low Earth Orbit Cubesat Constellation signal Defence System with Passive Intermodulation technology	KAI-EN MO
CMD-09	11:30 - 11:45	Inter-Opticube: the next generation of satellite remote sensing	Jr-Chiun Tsai
CMD-10	11:45 - 12:00	CubeSAT Swarms Impactor	HAO-HAN MO
CMD-11	12:00 - 12:15	Oxygen air glow Monitor Network for Ionosphere,OMNI	Yu-Chieh Huang

Student Paper Contest

1F, Building of Science College – Room 36173

1300 - 15:00		Student Paper Contest	
SPC-01	13:00 - 13:15	Comparative Study on International and National Space Resource Utilization Regulations	Samuel Hsin-Lun Wu
SPC-02	13:15 - 13:30	Review of Electric Propulsion in CubeSat	Tzu-Chiao Lin
SPC-03	13:30 - 13:45	"Spiral-V" Model: A Novel Rapid Developing Approach for HTTP-4 VTVL Hybrid Rocket Project	Yu-Kai Wang
SPC-04	13:45 - 14:00	Construction and Application of Helmholtz Cage for 6U CubeSat Verification	Tsung-Wen Lin
SPC-05	14:00 - 14:15	A Search Engine for Knowledge of Space	CHI-CHE, HUNG
SPC-06	14:15 - 14:30	An Approach to Deduced the Vibration Frequency of a Rocket from Measurements of a 3-Axis Magnetometer	HUNG-JUI CHEN

Poster Session

International Conference Hall – Multifunction Room

Poster Paper Session		
Poster Paper	Title	First Author
International Conference on GPS Radio Occultation, ICGPSRO		
PP-01	福衛七號衛星星系在軌三年後性能趨勢	劉乃辰
Spacecraft Bus and Payload		
PP-02	X-band 750W Solid State Power Amplifier Module for Satellite SAR Payload	MENG-LIN LEE
PP-03	RCS-DM module Random Vibration Response Analysis and Study of Structure Design Improvement	CHENG-YI TSAI
PP-04	Preliminary Study of Damping Pad Applied on Satellite Electrical Component	CHENG-YI TSAI
PP-05	Structural Design, Analysis and Vibration Test of FORMOSAT-8A Science Payload	YA-XUN YANG
PP-06	The Static and Dynamic Analysis of B5G Satellite Bus	吳偉銓
PP-07	Design and Analysis of 100W PA module chassis	吳偉銓
PP-08	Thermal Design and Analysis of the Formosat-8 Telescope	CHENG-EN HO
PP-09	Lessons Learned from NUTSAT Integration and Test	YI-XIAN CAI
PP-10	Design and manufacture of Transceiver chassis	Hsu Yung-Chieh
PP-11	Development of High Accuracy Gyro Noise Model for Satellite Attitude Determination Sensor	YI-LUN HSU
PP-12	Structural Improvement and Implementation of a Reaction Wheel Applied to Satellites	JUI-CHENG LO
PP-13	FORMOSAT-8 MIRRORS ASSEMBLY QUALIFICATION LEVEL PYROSHOCK TEST	LIU YEN TING
PP-14	Gimbal Adapter Design and Simulation for FORMOSAT-8 Telescope	劉彥廷

PP-15	Development of Electric Propulsion Test Facility in NSPO	J.W. LIN
PP-16	Development of 100W PA module for X-band SAR project	YOW-WEN HSU
PP-17	Design of high-resolution aurora imager for CubeSat	YU-HSIU LIU
PP-18	Aerospace-Grade Electro-Magnetic Compatibility Test for a Satellite Component - Star Tracker	Feng-Jui Yang
PP-19	Mitigation Means for Ghost Fringe Interference During Interferometric Measurement	YU-SHENG LIU
PP-20	Fabrication and Experimental Study of Aluminum-Ammonia Grooved Heat Pipe for Space Application	HO-CHUAN LIN
PP-21	Study on Vanadium Dioxide Thin Film Growing and Infrared Characteristics by Ion-Assisted Electron Gun Evaporation	Chen-Hao Wang
PP-22	The development of the aluminum alloy propellant tank for high test peroxide	YAO-CHUNG HSU
PP-23	Dynamic Modeling and Analysis of a Satellite with an Actuated Single-wing Solar Panel	YUNG-CHEN WU
PP-24	Design of High Efficiency Space Solar Module	TZU-HUAN CHENG
PP-25	Comparison between InGaP_InGaAs_Ge Triple-Junction Solar Cell and Si-based Solar Cell for Space Application	TZU-HUAN CHENG
Image and Science Data Processing		
PP-26	Paddy Rice Recognition Using Iterative Hierarchical AI Model and FORMOSAT-2 Image Data	YI-YUN HSU
PP-27	A Multispectral Dataset for Deep-Learning-Based Haze Removal in Satellite Images	Peng-Yu Chen
PP-28	Using QGIS Platform and Graphical Modeler to Improve the Workflow of Emergent Value Added Product	YI HSIN CHUNG
PP-29	MULTI-CORE ACCELERATION FOR THE GEOMETRIC CALIBRATION OF FORMOSAT-8 PREFLIGHT SIMULATION IMAGES	Tee-Ann Teo
PP-30	Time-Delay Integration Architecture of CMOS Image Sensor for Low Power Design	PO-YEN HUANG
PP-31	Artifact Detection System via Using YOLOv5 network for FORMOSAT-5 Images	CHIH-HAO LAI
PP-32	Quick TIS Testing and Materials Selection Guides for Straylight Suppression	TSUNG-PING LEE
Satellite Communication Applications/ Interstellar Mission Orbit Maneuvering and Deep Space Exploration		

PP-33	RESEARCH AND DEVELOPMENT OF TRITON SATELLITE ELECTRICAL GROUND SUPPORT EQUIPMENT	YI-GUI CHEN
PP-34	Preliminary Radiation Analysis of the Total Ionizing Dose for High Earth Orbit Space Environment	TSAI MING-HSIEN
PP-35	Qualification and Acceptance Test Flows for B5G COTS Components	Guo-Wei Lee
PP-36	Fault-Tolerant Control of Hall-Based Reaction Wheel Motor Including Transient Current Compensation	BO-TING LYU
PP-37	Design of a Real Time Dual-frequency GNSS Positioning Algorithm	WEI-YUN WANG
PP-38	Optical ground station for GEO laser communication receiver	KUAN-YU CHU
FORMOSAT-5 Mission Achievement		
PP-39	Nighttime space weather in the equatorial latitude observed by FORMOSAT-5 during 2018-2021	Kai-Wen Kan
PP-40	AIP Data Production Analysis from 2017 Winter to 2020 Winter	Yueh-Chun Hsieh
Space Radiation Testing Workshop		
PP-41	TOTAL IONIZING DOSE TEST FOR ISOLATED DC TO DC CONVERTER	CHIH-JIE LIN
PP-42	Radiation Mitigation Approaches for FORMOSAT-8 Satellite Mission	CHIH-CHENG HUANG
PP-43	RADIATION EFFECT TESTING FACILITIES IN TAIWAN	YI-CHUN TSAI
PP-44	Test Equipment Configuration and Shielding in Radiation Test Environment	YI-XIAN CAI
PP-45	A Study of FS-8 Radiation Analysis	TSUNG-PING LEE
PP-46	福衛七號 FORMOSAT-7 COSMIC-2 星本體 GPS 接收儀作為太空輻射偵測的研究分析	方振洲
PP-47	An International Cooperated Experiments in ISS- Cell Ark for Space Medicals	Lance, JUI-JEN, CHANG
Forum		
PP-48	「APRSAF 及國際上應爭取什麼成果,以利我國太空科技、產業、軟實力未來發展?」	鄭欣晨

PP-49	What achievements should we strive for in APRSAF and the international community to benefit the future development of Taiwan space technology, industry	Wei Cheng Wang
PP-50	Taiwan-Indonesia Space International Cooperation Potentials	Chiao-Ying Chou
PP-51	Preliminary System Design of a Passive Spaceborne SAR Payload	YOW-WEN HSU
PP-52	Overview for the Review Standards of Launch Permit	Yachi Yang
PP-53	Overview for the Review Standards of Registration of Launch Vehicle	Yachi Yang
PP-54	Overview for the Review Standards of Registration of Spacecraft	Yachi Yang
PP-55	Trends of the development of US Space Technologies and Industries	Dr. Sheu, Jyh-Shyang
PP-56	台灣應該重視太空垃圾的維持及解決	盧姿惠

● Registration :

11/3 International Conference Hall Lobby (國際會議廳大廳)

11/04-05 1F, Building of Science College (理學教學大樓)

● Poster :

Multifunction Room, International Conference Hall (國際會議廳多功能廳)

