

Track 1 (Ballroom 1 宴会厅 1)**P.M. Oct 16th**

Session1-1 Control-1(organized), Room: Ballroom 1 宴会厅 1

Chair: **Wenqing Yang**, Northwestern Polytechnical University

1	14:00-14:15	Aero-engine simulation model performance tracking method based on online transfer learning	A0146
		Jintao Hu, Hailong Tang, Min Chen	
		Beihang University	
2	14:15-14:30	Trajectory Control of a Spacecraft with a Robotic Manipulator on Two-Dimensional Plane using Udawadia-Kalaba Equation	A0590
		Kenwoo Kim, Dongwon Jung, Sara Woo	
		Korea Aerospace University	
3	14:30-14:45	Transformer-based Method for Unsupervised Anomaly Detection of Flight Data	A0333
		Hao Yu, Honglan Wu, Hao Liu	
		Nanjing University of Aeronautics and Astronautics	
4	14:45-15:00	Experimental analysis of attitude and position control for launch-vehicle-shaped vertical take-off and landing aircraft	A0478
		DongHwan Kim, MinJae Ko, NaRin Choi, YeonJoo Kim, DaeSung Jang	
		Korea Aerospace University	

Break 15:00-15:20

Session1-2 Control-2(organized), Room: Ballroom 1 宴会厅 1

Chair: **Jian Fu**, Beihang University

1	15:20-15:35	Tiltrotor Conversion System Design and Flight Dynamics Simulation for VTOL Aircraft	A0557
		Lining Yang, Jian Fu, Baoyan Hu, Zhaoyi Zhou	
		Beihang University	
2	15:35-15:50	Experimental Research on Friction Characteristics of DLC Coated Cylinder Block/Valve Plate Interface in Aerospace Integrated Motor Pumps	A0553
		Dingchong Lyu, Jian Fu, Ke Ci, Jianga Zhao, Shoujun Zhao	
		Beihang University	
3	15:50-16:05	System Identification and Analysis of Micro Helicopter Using Flight Experimental Data	A0718
		Minsu Kim, Park Heetae, Kim Seungkeun, Suk Jinyoung	
		Chungnam National University	
4	16:05-16:20	Model-Based Real-Time Fault Monitoring Strategy for Hydraulic Servo Actuators	A0550
		Zhiming Yan, Jian Fu, Zehua Ge	
		Beihang University	
5	16:20-16:35	Rigid-flexible Coupling Dynamic Modeling and Characteristics Analysis of Hydraulic Servo Actuation System for Flight Control	A0547
		Sun Mingwei, Fu Jian, Sun Huanyu	
		Beihang University	

Break 16:35-17:00

Poster Time

A.M. Oct 17th

Session1-3 Control-3, Room: Ballroom 1 宴会厅 1

Chair: **Dongwon Jung**, Korea Aerospace University

1	8:30-8:45	Stability Margin Evaluation of Dynamic Inversion Controller for Suborbital Spaceplane during Re-Entry Phase	A0546
		Tomotaka Watanabe, Koichi Yonemoto, Takahiro Fujikawa, Takahiro Matsukami	

		Tokyo university of science	
2	8:45-9:00	Multi-UAV Task Reallocation Based on Dynamic Window Consensus-Based Bundle Algorithm	A0121
		Junyi Shen, Jiuli Zhou, Wenhao Bi	
		Northwestern Polytechnical University	
3	9:00-9:15	Virtual Impact Point-Based Midcourse Guidance for Exo-Atmospheric Interception	A0338
		junsub hwang, hyungho na, jaemyung ahn	
		KAIST	
4	9:15-9:30	NDI-based Control Design for Transition Flight of Fixed-Wing VTOL UAV	A0459
		Jiwon Lee, Hanna Lee, Jinrae Kim, Youdan Kim	
		Seoul National University	
Break 9:30-9:45			
Session1-4 Control-4, Room: Ballroom 1 宴会厅 1			
Chair: Keita Kimura , Japan Aerospace Exploration Agency			
1	9:45-10:00	Real-time Optimal Trajectory Generation Algorithm for Rocket Propulsion Transport Vehicle	A0394
		Soojin Kim, Daesung Jang	
		Korea Aerospace University	
2	10:00-10:15	Ascent Trajectory Optimization and Guidance Command Calculation for Winged Experimental Rocket Considering the Ranges of Trim Angle of Attack and Roll Rate	A0583
		Yuta Tajima, Koichi Yonemoto, Takahiro Fujikawa, Masaaki Murakami	
		Tokyo University of Science	
3	10:15-10:30	System Optimization of Two-Stage-To-Orbit Spaceplane for Satellite Launch	A0568
		Yuki Ishii, Takahiro Fujikawa, Koichi Yonemoto	
		Tokyo University of Science	
4	10:30-10:45	Development of Winged Rocket WIRES#015 for Flight Demonstration of Suborbital Spaceplane Technologies	A0576
		Ryotaro Takakura, Koich Yonemoto, Takahiro Fujikawa	
		Tokyo University of Science	
Break 10:45-11:00			
Session1-5 Control-5, Room: Ballroom 1 宴会厅 1			
Chair: Shuguang Zhang , Beihang University			
1	11:00-11:15	Flight Path Control of Unmanned Aerial Vehicle Considering Attitude-Hold	A0191
		Hyeong-gwan Kang, Youdan Kim	
		Seoul National University	
2	11:15-11:30	Robust Sliding Mode Control for free-floating Space manipulator with the disturbance	A0601
		Sara Woo, Heokjune You, Dongwon Jung	
		Korea Aerospace University	
3	11:30-11:45	Learning Aircraft Pilot skills by Adversarial Inverse Reinforcement Learning	A0282
		Kaito Suzuki, Tsuneharu Uemura, Takeshi Tsuchiya, Hirofumi Beppu, Yusuke Hazui, Hitoi Ono	
		The University of Tokyo	
4	11:45-12:00	Design and Performance Analysis of Total Energy Control System for a High-Altitude Long-Endurance UAV	A0527
		Chanku Han, Hoijo Jeong, Seungkeun Kim, Jinyoung Suk, Hyoungsik Choi, Sungyug Kim, Yunggyo Lee, Soohun Oh	
		Chungnam National University	

P.M. Oct 17th			
Session1-6 Control-6, Room: Ballroom 1 宴会厅 1			
Chair: Itoh Eri , The University of Tokyo			
1	14:00-14:15	Rendering Involved and Machine Learning based Environment Interpretation Integrated Geometry and Image	A0356
		Kunbum Park, Takeshi Tsuchiya	
		The University of Tokyo	
2	14:15-14:30	Automatic Tracking of Marine Life by Multicopter Type UAV Using Image Recognition and Deep Neural Network	A0709
		Kyoma Arai, Kaito Koitabashi, Yoshinobu Inada	
		Graduate School of Tokai University	
3	14:30-14:45	Modified Iterative Guidance for Multi-stage Anti-ballistic Missile with Solid Propellant Considering Coasting Phase	A0190
		Yeontaek Jung, Hanna Lee, Youngjun Lee, Youdan Kim	
		Seoul National University	
4	14:45-15:00	Research on Longitudinal Attitude and Velocity Coordinated Control Method for a low Aspect Ratio Flying Wing Aircraft	A0384
		Hongbo Xin, Qingyang Chen, pen Wang, Yujie Wang, Zhongxi Hou, Yafei Lu	
		National University of Defense Technology	
Break 15:00-15:20			
Session1-7 Control-7, Room: Ballroom 1 宴会厅 1			
Chair: Higashino Shin-Ichiro , Kyushu University			
1	15:20-15:35	Self-Learning Tracking Control for Missile using Incremental Approximate Dynamic Programming	A0243
		Juyoung Kim, Hanna Lee, Youngjun Lee, Jongho Park, Youdan Kim	
		Seoul National University	
2	15:35-15:50	Stability Margin Guarantee of Quaternion Attitude Control System Based on Dynamic Inversion Theory	A0558
		Kotaro Yamasaki, Koichi Yonemoto, Takahiro Fujikawa, Takahiro Matsukami, Tomotaka Watanabe, Fumiya Haga	
		Tokyo University of Science	
3	15:50-16:05	Optimal Fire Distribution Method of Airborne Dispenser to Airport Runway blockade Based on NSGA-II	A0122
		Jiuli Zhou, Junyi Shen, Wenhao Bi	
		Northwestern Polytechnical University	
4	16:05-16:20	Evolutionary Trajectory Optimization for Suborbital Spaceplane by Combining Direct and Inverse Trajectory Design Approaches	A0545
		Masaaki Murakami, Takahiro Fujikawa, Koichi Yonemoto	
		Tokyo University of Science	
5	16:20-16:35	Robust controller design based on feedback linearization for UAV	A0457
		Yasuyuki Taguchi, Naoto Morita, Takeshi Tsuchiya	
		The University of Tokyo	
6	16:35-16:50	Intelligent adaptive control method for ducted fan unmanned aircraft	A0756
		Ning Zhang	
		China Academy of Aerospace Aerodynamics	

Track 2 (Ballroom 2 宴会厅 2)

P.M. Oct 16th

Session2-1 CFD-1, Room: Ballroom 2 宴会厅 2

Chair: **Youcheng Xi**, Tsinghua University

1	14:00-14:15	Turbulence Modeling Based on Field Inversion and Symbolic Regression	A0133
		Chenyu Wu, Yufei Zhang	
		Tsinghua University	
2	14:15-14:30	Numerical simulation of gas-particle-structure coupling problem in the process of particle impact on aeroengine blade	A0346
		Tengda Shi, Fuzhen Chen, Hong Yan	
		Northwestern Polytechnical University	
3	14:30-14:45	Aerodynamic Efficacy of Changing the Chordwise Installation Position of Multi-Winglet on Commercial Aircraft	A0337
		Erina Kobayashi, Kazuhisa Chiba	
		The University of Electro-Communications	
4	14:45-15:00	Effect of mass flow rate on drag reduction with counter-flow jet in laminar hypersonic flow at high Reynolds number	A0313
		Hee Yoon, Kojiro Suzuki	
		The University of Tokyo	

Break 15:00-15:20

Session2-2 CFD-2, Room: Ballroom 2 宴会厅 2

Chair: **Yufei Zhang**, Tsinghua University

1	15:20-15:35	Numerical investigation on an under-expanded Jet from a rectangular nozzle with aft deck	A0274
		Hui Zhang	
		AVIC The First Aircraft Institute	
2	15:35-15:50	Development of Highly Parallel Global Input-Output Solver	A0283
		Youcheng Xi, Song Fu	
		Tsinghua University	
3	15:50-16:05	Calibration and Application of an Algebraic Transitional Model for Fast Prediction of Boundary Layer Transition over High-lift Airfoils	A0306
		Li Li, WU Junsheng, LIANG Yihua	
		AVIC Xi'an Aeronautics Computing Technique Research Insitute	
4	16:05-16:20	Drag Reduction Mechanism of Aircraft Passivation Leading Edge Based on Multi-slit Jet	A0286
		Yongsheng Zhao, Jingang Dong, Jiang Zhang, Junfei Wu	
		China Academy of Aerospace Aerodynamics	
5	16:20-16:35	Aerodynamic optimization of an axial compressor using directly manipulated free-form deformation and data-driven optimizer	A0634
		Yi Liu, Jiang Chen, Hang Xiang	
		School of Energy and Power Engineering, Beihang University	
6	16:35-16:50	Mixing layer for Incompressible Flows: a Numerical Study	A0291
		Trung Dung Nguyen, The Hung Tran, Sharma Gopal, Jun Tanimoto	
		Le Quy Don Technical University, Kyushu University	

Break 16:50-17:00

Poster Time

A.M. Oct 17th			
Session2-3 CFD-3, Room: Ballroom 2 宴会厅 2			
Chair: Donghun Park , Pusan National University			
1	8:30-8:45	Application of r structured adaptive mesh based on flow field characteristics in separated flow simulation	A0484
		Siyuan Huang, Lei Qiao, Jian Shen, Jiakuan Xu, Junqiang Bai	
		Northwestern Polytechnical University	
2	8:45-9:00	Study on Reduction of Aerodynamic Heating by using Backward Facing Step	A0498
		Daiki Yoshikawa, Ko Ogasawara	
		Tokyo University of Science	
3	9:00-9:15	Prediction of Aerodynamic Data of Missile Surface Using Unfolding Mesh Method and Autoencoder	A0487
		Hansol Nam, Kyu Hong Kim, Hansol Yoo, Hyoungjin Kim	
		Department of Aerospace Engineering, Seoul National University	
4	9:15-9:30	Applicability Research and Improvement of Modal Method in CFD/CSD Coupling Static Aeroelastic Analysis	A0119
		Kun Mao, Wuxing Jing, Fei Xue, Kai Chen, Yong Lu, Yingli Su, Meihong Zhang	
		Harbin Institute of Technology; Shanghai Aircraft Design and Research Institute	
Break 9:30-9:45			
Session2-4 CFD-4, Room: Ballroom 2 宴会厅 2			
Chair: Lei Qiao , Northwestern Polytechnical University			
1	9:45-10:00	Numerical Analysis of Aeroacoustic Characteristics of XV-15 Considering Fuselage Interacting and Scattering	A0530
		Dazhi Sun, Xi Chen, Qijun Zhao	
		Nanjing University of Aeronautics and Astronautics	
2	10:00-10:15	Construction of Aerodynamic Database for Flight Simulator of Lift-Cruise Type eVTOL Aircraft	A0561
		Wooseung Lee, Myungsik Tai, Dahye Kim, Seongwook Choi, Donghun Park	
		Pusan National University	
3	10:15-10:30	Numerical investigation of the effect of aircraft nose wall waviness on the hole pressure of the static pressure probe	A0186
		Dong-Yun Zhang, Zhen-Wei Wang, Xiang Wu, Biao Wang, He-Yong Xu	
		Northwestern Polytechnical University, Shanghai Aircraft Design and Research Institute, COMAC	
4	10:30-10:45	Numerical Analysis for rotor aeroacoustic characteristics considering the influence of unsteady vortex flowfield in hover	A0087
		Wei Bian, Xi Chen, Muyang Lin, Guoqing Zhao, Bo Wang, Qijun Zhao	
		Nanjing University of Aeronautics and Astronautics	
Break 10:45-11:00			
Session2-5 CFD-5, Room: Ballroom 2 宴会厅 2			
Chair: Chao Zhou , Beihang University			
1	11:00-11:15	Propulsive/aerodynamic coupled characteristics of the distributed-propulsion-wing in hover and forward flight	A0082
		Kelei Wang, Zhou Zhou	
		Northwestern Polytechnical University	
2	11:15-11:30	Aerodynamic Analysis of Airfoil at Mars Atmospheric Condition by Using Implicit Large Eddy Simulations	A0562

		Sukyung Yoon, Donghun Park Pusan National University	
3	11:30-11:45	Physics informed Neural Network for Eigenvalue Problems in Flow Instability Analysis Jiakuan Xu, Junqiang Bai Northwestern Polytechnical University	A0118
4	11:45-12:00	Research on the Impact of Embedded Weapon Release Characteristics Jia Lian, Junqiang Ai AVIC	A0504
P.M. Oct 17th			
Session2-6 CFD-6, Room: Ballroom 2 宴会厅 2			
Chair: Gang Wang , Northwestern Polytechnical University			
1	14:00-14:15	Study on unsteady ventilation for aircraft cabins Yun Wei, Shaoxia Li Civil Aviation University of China	A0157
2	14:15-14:30	Establishing System-Level Design Process and Platform for Unmanned Vehicles Jeonghwan Kim, Hyunsoo Kim, Hojin Kim, Younghyo Kim, Kybeom Kwon, Kwanjung Yee Seoul National University	A0309
3	14:30-14:45	An Approach to Aerodynamic Problems during Supersonic Flight on Mars Using CFD Takafumi Yamada, Atsushi Okamoto National Institute of Technology, Tsuyama College	A0647
4	14:45-15:00	Investigation on the folding method and inflation process of ram air parachute Qi Liu, Gang Yu Aerospace Life-Support Industries Ltd. AVIC, Hubei University of Arts and Science	A0247
Break 15:00-15:20			
Session2-7 CFD-7, Room: Ballroom 2 宴会厅 2			
Chair: Takafumi Yamada , National Institute of Technology, Tsuyama College			
1	15:20-15:35	GPU-Accelerated Flow Simulations on Unstructured Grids using a Multi-Colored Gauss-Seidel Method Liu Yang, Jian Yang MetaX Integrated Circuits (Shanghai) Co., Ltd	A0177
2	15:35-15:50	A Parametric Study on Effect of Porous Surface on Hypersonic Boundary Layer Instability Jonghyeong Park, Donghun Park Pusan national university	A0600
3	15:50-16:05	A Spanwise Loss Model of Turbine Cascade With Tip Clearance Based on Machine Learning Yucheng Chen, Donghai Jin, Xingmin Gui Beihang University	A0241
4	16:05-16:20	Investigation on the Effect of Honeycomb to the Leakage of Labyrinth Seal within Support Seal System Wei Zhang, Aleksandr Vinogradov, Peng Sun Samara National Research University	A0292
5	16:20-16:35	Numerical Investigation of Active Flow Control of Blade Synthetic Jet on Performance and Stability of Transonic Axial Compressor Rotor Guang Wang, Wenhao Liu, Wuli Chu Guilin University of Aerospace Technology	A0155

Track 3 (Ballroom 3 宴会厅 3)

P.M. Oct 16th

Session3-1 Aircraft Design-1, Room: Ballroom 3 宴会厅 3

Chair: **Ke Zhao**, Northwestern Polytechnical University

1	14:00-14:15	Aerodynamic shape optimization on the wing/nacelle configuration of a distributed tiltrotor aircraft	A0392
		Jiahui Song, Yue Wang	
		Northwestern Polytechnical University	
2	14:15-14:30	Research on Real Time Prediction Method of Aircraft Flight Load Based on Digital Twin Technology	A0460
		Congling Lu, Ning Zong, Xuemei Shi	
		Yangzhou Collaborative Innovation Research Institute, Shenyang Aircraft Design & Research Institute	
3	14:30-14:45	Aerodynamic Optimization Design Using Two-Stage Optimization Based on BezierGAN Parameterization	A0396
		Xie XiaoYe, Duan YanHui	
		School of Systems Science and Engineering, Sun Yat-Sen University	
4	14:45-15:00	Air-water Dual Purpose Rotor Shape Optimization of Trans-medium Aircraft	A0479
		Fan Yang, Xi Chen, Guoqing Zhao, Qijun Zhao	
		Nanjing University of Aeronautics and Astronautics	

Break 15:00-15:20

Session3-2 Aircraft Design-2, Room: Ballroom 3 宴会厅 3

Chair: **Yasong Qiu**, Northwestern Polytechnical University

1	15:20-15:35	An Aeronautical System Parameters Modeling Method Crossing Multi-Architecture Levels in the MBSE Approach	A0492
		Yuqiang Guo, Junxian Guo	
		China Helicopter Research and Development Institute	
2	15:35-15:50	Influence of Viscosity Coefficient Variation in Discrete Adjoint Method	A0494
		Jun Deng, Ke Zhao, Wei Zhang, Jiangtao Huang, Lu Xia, Zhenghong Gao	
		Northwestern Polytechnical University	
3	15:50-16:05	An Efficient Multi-Objective Aerodynamic Shape Optimization based on Geometric Reduction model	A0549
		Xingyu Shi, Yanhui Duan	
		Sun Yat-sen University	
4	16:05-16:20	Multidisciplinary Design Optimization of TSTO Spaceplane with Airbreathing Engines	A0565
		Masaki Honda, Takahiro Fujikawa, Koichi Yonemoto, Hiroaki Kobayashi, Yusuke Maru	
		Tokyo University of Science	

Break 16:20-17:00

Poster Time

A.M. Oct 17th

Session3-3 Aircraft Design-3, Room: Ballroom 3 宴会厅 3

Chair: **Yoshinobu Inada**, Tokai University

1	8:30-8:45	SVR enhanced Kriging for optimization with noisy evaluations	A0620
		Ke-shi zhang, You-quan Du	
		Northwestern Polytechnical University	
2	8:45-9:00	Airfoil Optimization in Propeller Slipstream Based on Generative Adversarial Network	A0631
		Ziyu Li, MingChao Yang, Zhengping Wang, Zhou Zhou, Wenling Wei	
		Xi'an Flight Automatic Control Research Institute	
3	9:00-9:15	Analysis of Hydrodynamic Ram Effect of Aircraft Fuel Tank Filled with Foam under Fragment Impact	A0341

		Meng tao Zhang, Yang Pei, Yin jie Ma, Yu xue Ge School of Aeronautics, Northwestern Polytechnical University	
4	9:15-9:30	Challenges for Integration of Drone into National Airspace System Shengjun Qi Chinese Flight Test Establishment	A0361
Break 9:30-9:45			
Session3-4 Aircraft Design-4, Room: Ballroom 3 宴会厅 3			
Chair: Cees Bil , RMIT University			
1	9:45-10:00	Aerodynamic Simulations of a Cargo UAV with Twin-Boom and Rear-Mounted Propeller Changning Chen, Xiaolu Wang Zhengzhou University of Aeronautics	A0659
2	10:00-10:15	Optimum Wing Design of Tandem Wing Aircraft Using Microbial Genetic Algorithm and Aerodynamic Performance Analyzing Software XFLR5 Yoshinobu Inada, Chunhui Li Tokai University	A0680
3	10:15-10:30	Low-Boom Design of T-Tail Supersonic Transport Conceptual Configuration Qing Chen, Zhonghua Han Northwestern Polytechnical University	A0723
4	10:30-10:45	Aerodynamic study of variable swept wing for a wide-Mach-number-range aircraft Jianhua Ma, Yue Wang Northwestern Polytechnical University	A0693
Break 10:45-11:00			
Session3-5 Aircraft Design-5, Room: Ballroom 3 宴会厅 3			
Chair: Zhonghua Han , Northwestern Polytechnical University			
1	11:00-11:15	Impact of geographical and logistics considerations on the life cycle assessment of launchers Thomas Bellier, Cees Bil, Joseph Morlier, Annafederica Urbano, Adrian Pudsey RMIT University	A0674
2	11:15-11:30	Design and Parameters Analysis of a Solar Powered UAV for Extended Endurance Zong Jia, Shao Zhuang, Zhou Zhou Northwestern Polytechnical University	A0322
3	11:30-11:45	A Novel Optimization Approach of Transonic Buffet for a Supercritical Airfoil Tianshi Cao, Junqiang Bai, Yasong Qiu, Min Zhong Northwestern Polytechnical University	A0285
4	11:45-12:00	Simulation of propeller slipstream and its effect on wing Qinze Zheng, Yu Liang, Xiaowen Shan Southern University of Science and Technology	A0324
P.M. Oct 17th			
Session3-6 Aircraft Design-6, Room: Ballroom 3 宴会厅 3			
Chair: Wenping Song , Northwestern Polytechnical University			
1	14:00-14:15	Research on multi-objective optimization and uncertainty analysis of supersonic aircraft Xiao Luo, Chao Song, Bo Chen, HongYang Liu, Yu Tang, Tao Tang China Aerodynamics Research and Development Center	A0726
2	14:15-14:30	Multi-Objective Aerodynamic Design Optimization of Rotor Airfoils using an Efficient Surrogate-Based Algorithm Zuo Lu, Zhong-Hua Han, Wen-Ping Song, Ke-Shi Zhang Northwestern Polytechnical University	A0733

3	14:30-14:45	A Rapid Evaluation Method for the Aero-propulsion Coupling Characteristics of a Distributed Electric Propulsion Aircraft	A0205
		Haoliang Yu, Tao Lei, Xingyu Zhang, Xiaobin Zhang	
		Northwestern Polytechnical University	
4	14:45-15:00	An Inverse Design Method for Wing Shape Optimization Guided by Spanwise Lift Distribution	A0734
		Heng-Bo Guo, Zhong-Hua Han, Yang Zhang, Wen-Ping Song	
		Northwestern Polytechnical University	
Break 15:00-15:20			
Session3-7 Aircraft Design-7, Room: Ballroom 3 宴会厅 3			
Chair: Xiaolu Wang , Zhengzhou University of Aeronautics			
1	15:20-15:35	Standardization Process of Multirotor UAV using Optimal Design Framework, Part 1: UAV Grouping Methodology with Clustering and Classification Algorithms	A0221
		Sangsoo Jang, Chanho Kim, Dohoon Kim, Hansol Nam, Do Ye Park, Min Woo Kang, Deok-Young Lee, Kyu Hong Kim, Deokgeon Kim	
		Seoul National University	
2	15:35-15:50	Standardization Process of Multirotor UAV using Optimal Design Framework, Part 2: Standard Specification of Grouped UAVs	A0209
		Kyu Hong Kim, Chanho Kim	
		Seoul national university	
3	15:50-16:05	Effect of wing pressure distribution on sonic-boom intensity of supersonic transport aircrafts	A0531
		Kefeng Zheng, Wenping Song	
		Northwestern Polytechnical University	
4	16:05-16:20	Conceptual Design of an Ultra-Long-Endurance UAV Using Self-Focusing Microwave Wireless Power Transmission	A0115
		Long Zhou, Linggong Zhao, Ganglin Wang, Qian Xiang	
		Chinese Aeronautical Establishment	
5	16:20-16:35	Aerodynamic Analysis of a rotor-embedded VTOL UAV	A0423
		Shunshun Zhu, Xiaolu Wang	
		Zhengzhou University of Aeronautics	

Track 4 (Meeting Room A 会议室 A)

P.M. Oct 16th			
Session4-1 Engines-1, Room: Meeting Room A 会议室 A			
Chair: Jianping Wang , Peking University			
1	14:00-14:15	CFD Modeling of Sustainable Aviation Fuel Sensitivity on Aero-engine Combustor	A0070
		Songyang Li, Ruixin Wang, Wenjie Tao	
		AECC Commercial Aircraft Engine Co., Ltd	
2	14:15-14:30	Ignition and Combustion Characteristics of Atomized Al-Mg Alloy Particles with Different Compositions	A0232
		Yunchao Feng, Likun Ma, Yandong Liu, Zhixun Xia	
		National University of Defense Technology	
3	14:30-14:45	Research on the Effect of Front Variable Area Bypass Injector Modulation on the Adaptive Cycle Engine Performance Based on Multi-Fidelity Simulation	A0318
		Zhewen Xu, Hailong Tang, Jingmei Cong, Min Chen, Jiyuan Zhang	
		Beihang University	
4	14:45-15:00	Design Optimization of A Honeycomb Bluff Body for Hydrogen Micromix Combustion	A0097
		Da Mo, Hongyu Ma, Yuzhen Lin, Xiao Han	
		AECC Shenyang Engine Research Institute	
Break 15:00-15:20			
Session4-2 Engines-2, Room: Meeting Room A 会议室 A			
Chair: Tianyu Pan , Beihang University			
1	15:20-15:35	Comparison and Analysis of Adaptive Cycle Engine Configuration for Typical Flight Mission	A0373
		Zian Wang, Min Chen, Hailong Tang, Jiyuan Zhang, Linge Tang, Yi Xiao	
		Beihang University	
2	15:35-15:50	A Multidisciplinary Model-based Engine Rotor Integrity Assessment Approach Derived from System Safety Requirements	A0242
		Qinglin Ma, Shuiting Ding, Tian Qiu, Lei Qi, ChenYu Gan, Shengyu Bao	
		Beihang University	
3	15:50-16:05	Research on the Calculation Method of Oil Consumption for Commercial Turbofan Engines Durability Test	A0481
		Xinhao Tang, Wendi Xu	
		Aero Engine	
4	16:05-16:20	Highly Fault-Tolerant Thrust Estimation for Gas Turbine Engines: A Differentiated Recurrent Salp Swarm Algorithm for Redundant Feature Separation and Recombination	A0679
		Hang Zhao, Zengbu Liao, Ming Li, Wei Liu, Jinxin Liu, Zhiping Song	
		School of Mechanical Engineering, Xi'an Jiaotong University	
5	16:20-16:35	Research on Distributed Intelligent Node	A0167
		Ming Yu, Wei Niu	
		Xi'an Aeronautics Computing Technique Research Institute, AVIC	
Break 16:35-17:00			
Poster Time			
A.M. Oct 17th			
Session4-3 Emerging Space Technologies(organized), Room: Meeting Room A 会议室 A			
Chair: Seungkeun Kim , Chungnam National University			
1	8:30-8:45	Space Agency for ASEAN: Has the Time Come?	A0673
		Riccardo Corrado, Maximilien Berthet	
		American University of Phnom Penh	

2	8:45-9:00	Korean Microsatellite Constellation System for Rapid Response to Natural Disaster, the Concept of Operation and Development Status	A0706
		Junchan Lee, Eunjin Jang, Hyo Jin Jeong, Sukmin Choi, Chang Ho Woo, Son-Goo Kim, Se-Yeon Kim, Seung-han Oh, Sang-Hyun Lee, Chol Lee, Chi-Wook Oh, Chol-Woo Lim, Hungu Lee, Jae-Heon Jeong, Hyun-Ok Kim, Chi ho Kang	
		SaTReC, KAIST	
3	9:00-9:15	Conceptual Design of a Navigation Satellite utilizing the CubeSat platform for the future Lunar Navigation Satellite system	A0732
		Hyewon Park, Sunhwan Gwon, Kihyun Kim, Minji Kim, HyunJoong Kim, Ah-yeon Park, Pilkyo Jeong, O-jong Kim	
		sejong university	
4	9:15-9:30	Overview of the Payload Support Capability of the Aerospace Basic Experiment Cabinet of the China Tiangong Space Station	A0335
		Zhao Yin, Pei Guo, Zheng yi Wang, Jin lu Yang, Yan Song	
		Beijing Institute of Spacecraft System Engineering	
Break 9:30-9:45			
Session4-4 Heat and Cooling, Room: Meeting Room A 会议室 A			
Chair: Liangxing Li , Xi'an Jiaotong University			
1	9:45-10:00	Performance analysis of turbine-powered air circulation system	A0382
		Qihang Lu, Dalin Zhang	
		Nanjing Engineering Institute of Aircraft Systems, Nanjing University of Aeronautics and Astronautics	
2	10:00-10:15	Experimental and Numerical Study on Flow Resistance of Turbine Blade Tilted Trailing Edge Slots	A0107
		Xingao Kong, Dong Lv, Yingshi Liu, Lei Shi, Weilong Wu	
		Innovation Lab of Turbine Blade, School of Energy and Power Engineering, Dalian University of Technology	
3	10:15-10:30	Comparative Analysis of Heat Transfer in Combustion Chambers with Different Ribbed Inner Surface	A0295
		Dongwoo Choi, Kyubok Ahn	
		Chungbuk National University	
4	10:30-10:45	Numerical Study on the 3D Inclination Angle of Film Cooling under Non-adiabatic Conditions	A0387
		Yingshi Liu, Dong Lv, Xingao Kong, Hang Su, Maoyuan Li	
		Dalian University of Technology	
Break 10:45-11:00			
Session4-5 Structures and Materials-1, Room: Meeting Room A 会议室 A			
Chair: Yaguang Wu , Beihang University			
1	11:00-11:15	A General Theoretical Model for the Rigid-Flexible-Thermal Coupling Effect on Rotating Large-Deflection Structures	A0360
		Liyang Zhao, Yijun Chai, Xiongwei Yang, Yueming Li	
		State Key Laboratory for Strength and Vibration of Mechanical Structures, Shaanxi Key Laboratory of Environment and Control for Flight Vehicle, School of Aerospace Engineering, Xi'an Jiaotong University	
2	11:15-11:30	Mechanism Research on Braking Induced Gear Walk of Landing Gear Assembly	A0128
		Gang Liu, Di Wang, Wenqing Zhao, Lu Wang, Chanbo Li	
		Xi'an Aviation Brake Technology Co., Ltd.	
3	11:30-11:45	A Study on Simulation of Deployment of James Webb Space Telescope using Multibody Dynamics and Artificial Neural Network-based Surrogate Model	A0598
		Jeong Hoon Park, Myeong-Seok Go, Il-Joon Hwang, Jae Hyuk Lim	
		Jeonbuk national university	

4	11:45-12:00	Investigation on the Suppression of Non-synchronized Vibration of A Fan Blisk	A0108
		Yixiong Liu, Dingxi Wang, Xiangping Wang, Qing Du, Tianzi Zhang	
		AECC Shenyang Engine Research Institute	
5	12:00-12:15	Nonlinear Aeroelastic Study of an All-Movable Horizontal Tail with Multiple Free-Plays and Angle of Attack	A0584
		Xinyu Ai, Yuguang Bai, Wei Qian, Xiangyan Chen, Zheng Chen, Yuhai Li	
		Dalian University of Technology	
P.M. Oct 17th			
Session4-6 Structures and Materials-2, Room: Meeting Room A 会议室 A			
Chair: Xiasheng Sun , Chinese Aeronautical Establishment			
1	14:00-14:15	A stiffener layout design method for vibration reduction in a wide frequency band	A0198
		Anlue Li, Yu Fan, Yaguang Wu, Lin Li	
		Beihang University	
2	14:15-14:30	Shock Response Spectrum of Pyroshock Simulation Test Device Using Circular Resonator Plate with Variable Thickness	A0515
		Yeon-Ju Kim, Hyun-Jun Cho, Mi-Yeon Lee, Seung-Ah Oh, In-Gul Kim	
		Chungnam National University	
3	14:30-14:45	Dynamic Characteristic Analysis of S-shaped Elastic Ring Support with Piezoelectric Damping	A0250
		Yu Hu, Yu Fan, Yaguang Wu, Lin Li	
		Beihang University (BUAA)	
4	14:45-15:00	Analysis of the Influence of Intentional Mistuning on the Forced Response Characteristics of the Splitted Impeller via ROM	A0520
		Kaicheng Liu, Yingliang Yan, Zhaoyu Liu	
		Beijing Aerospace Propulsion Institute	
Break 15:00-15:20			
Session4-7 Aeroelasticity, Room: Meeting Room A 会议室 A			
Chair: Weizhe Feng , Dalian University of Technology			
1	15:20-15:35	Nonlinear Aeroelastic Analysis Framework for the Large-Deformation Wing Considering Distributed Propellers' Effects	A0248
		Xuan Wu, Zhou Zhou	
		Northwestern Polytechnical University	
2	15:35-15:50	An optimal trim configuration optimization framework for highly flexible aircraft	A0234
		Jiachen Wang, Zhou Zhou	
		School of Aeronautics, Northwestern Polytechnical University	
3	15:50-16:05	Equivalent Beam Modeling Method for Geometric Nonlinear Static Aeroelastic Analysis	A0214
		Zhiying Chen, Yang Meng, Zhiqiang Wan, Chao Yang	
		Beihang University	
4	16:05-16:20	Performance Analysis of Conformal Antenna considering Aeroelastic Response	A0141
		Chao An, Rui Zhao, Changchuan Xie, Chao Yang	
		Beihang University	
5	16:20-16:35	Influence of Kinematics on Aerodynamic Characteristics of an Albatross-like Flexible Flapping Wing in Forward Flight	A0261
		Nongyue Gao	
		Beihang University	

Track 5 (Meeting Room B 会议室 B)

P.M. Oct 16th			
Session5-1 Engines-3(organized), Room: Meeting Room B 会议室 B			
Chair: Dong Lv , Dalian University of Technology			
1	14:00-14:15	Construction of Cyber-Physical System in Electronic Assembly Workshop for Manufacturing Avionic Devices	A0116
		Changlin Yang, Jiantong Yang, Xinliang Tian	
		Aeronautics Computing Technology Research Institute	
2	14:15-14:30	Optimization and Evaluation of Supersonic Civil Aircraft Propulsion System Scheme Design Driven by Multiple Evaluation Indicators	A0348
		Guohe Jiang, Min Chen, Jingmei Cong, Hailong Tang, Jiyuan Zhang	
		School of Energy and Power Engineering, Beihang University	
3	14:30-14:45	A Preliminary Flow Path Design Tool for Advanced Aero-Engine	A0372
		Zhewen Xu, Hailong Tang, Min Chen, Jiyuan Zhang	
		Beihang University	
4	14:45-15:00	Modeling and Control Law Optimization Design of Starting process of the Three-shaft Turboshift Engine	A0357
		Dongxu Yan, Hailong Tang, Min Chen, Jiyuan Zhang, Pengcheng Dong, Juhao Zhou	
		Research Institute of Aero-Engine, Beihang University	
Break 15:00-15:20			
Session5-2 Engines-4, Room: Meeting Room B 会议室 B			
Chair: Min Chen , Beihang University			
1	15:20-15:35	Experimental study on film heating efficiency of the full surface for inlet cone	A0740
		Qi Jia, Xinwei Jiang, Jianjun Zhou, Yundan Li, Weijiang Xu	
		AECC Shenyang Engine Research Institute	
2	15:35-15:50	Thermal load sensitivity analysis and mass reduction design of heat pipe turbine disk	A0235
		Yuchen Zhang, Guo Li, Guohua Zhang, Shuiting Ding	
		Beihang University School of Energy and Power Engineering	
3	15:50-16:05	Numerical simulation on jet impingement heat transfer with cross flow for aero-engine inlet cone	A0112
		Xinwei Jiang, Jianjun Zhou, Qi Jia, Yundan Li, Weijiang Xu	
		AECC Shenyang Engine Research Institute	
4	16:05-16:20	Aerodynamic Design and Study of a Vaneless Counter-Rotating Power Turbine with a High Output Power Ratio	A0563
		Xincan Le, Dong Lv	
		Dalian University of Technology	
Break 16:20-17:00			
Poster Time			
A.M. Oct 17th			
Session5-3 Engines-0, Room: Meeting Room B 会议室 B			
Chair: Shuiting Ding , Civil Aviation University of China			
1	8:30-8:45	Intelligent Maintenance for Aero-Engines: Embracing Interpretable Artificial Intelligence	
		Ruqiang Yan	
		Xi'an Jiaotong University	
2	8:45-9:00	Research on the Interaction between the Detonation Chamber and Axial Turbine in a Pulse Detonation Turbine Engine	
		Zhiwu Wang	
		Northwestern Polytechnical University	

3	9:00-9:15	Experimental Study on Self-Pulsation Characteristics of Swirl Coaxial Injectors with Different Internal Geometries	A0437
		Hadong Jung	
		Chungbuk National University	
4	9:15-9:30	Collaborative design of future cross-space and cross-speed domain aviation gas turbine engine	
		Tian Qiu	
		Beihang University	
Break 9:30-9:45			
Session5-4 Engines-0, Room: Meeting Room B 会议室 B			
Chair: Haiwang Li , Beihang University			
1	9:45-10:00	Dynamic characteristics analysis and fault diagnosis of complex systems based on nonlinear mode synthesis	
		Xingrong Huang	
		Beihang University	
2	10:00-10:15	Turbofan Engine Fault Detection and Diagnosis Algorithm Based on Experimental Data	A0687
		Chae Yeon Kim	
		Inha University	
3	10:15-10:30	The design of the welded rotor in the future heavy duty gas turbine based on multiple physical field coupling method	
		Bo Hu	
		Tsinghua University	
4	10:30-10:45	Development of a Micro-Mix H ₂ -O ₂ -H ₂ O Combustion System for Gas Turbine Applications	
		Bowen Sa	
		Tsinghua University	
Break 10:45-11:00			
Session5-5 Engines-5, Room: Meeting Room B 会议室 B			
Chair: Hideaki Ogawa , Kyushu University			
1	11:00-11:15	Analysis of the Impact of Ion-Wall Recombination on Hall Thruster Performance	A0640
		Seongil Seo, Bok Jik Lee, Kybeom Kwon, Seoghyeon Jeong	
		Seoul National University	
2	11:15-11:30	Addressing Class-Imbalanced Learning in Real-Time Aero-Engine Gas-Path Fault Diagnosis via Feature Filtering and Mapping	A0665
		Zengbu Liao, Jia Geng, Yuntao Deng, Xuefeng Chen, Zhiping Song, Hang Zhao	
		Xi'an Jiaotong University	
3	11:30-11:45	Analysis of fault mode of variable geometry component on variable cycle engine	A0411
		Jiyuan Zhang, Yunfan Lin, Hailong Tang, Min Chen	
		Beihang University	
4	11:45-12:00	An improved engine model adaption method based on search interval optimization	A0319
		Shaochen Li, Hailong Tang, Min Chen, Huayu Fu, Jiyuan Zhang	
		Beihang University	
5	12:00-12:15	A Comprehensive Study of Tip Clearance Control Based On a Multidimensional Transient Clearance Prediction Approach	A0452
		Jie Wei, Yu Fu, Kai Zhou, Heli Yang, Xinqian Zheng	
		Tsinghua University, AECCSichuan Gas Turbine Establishment	
P.M. Oct 17th			
Session5-6 Engines-6(organized), Room: Meeting Room B 会议室 B			
Chair: Changho Nam , Korea Aerospace Research Institute			
1	14:00-14:15	Study on Versatile Modular Engine Performance Simulation Platform	A0320
		Li Deng, Min Chen, Hailong Tang, Jiyuan Zhang, Yudong Liu, Yi Xiao	

		Beihang University	
2	14:15-14:30	Steady-State Performance Model Identification Method of Low Bypass Ratio Turbofan Engine Based on Evolutionary Algorithm Yue Wu, Ji-Yuan Zhang Beihang University	A0385
3	14:30-14:45	Performance Analysis and Optimization of Three Spool Aero Derivative Gas Turbine Fueled with Liquid Hydrogen Shaohua Song, Ke Zhang AECC Shenyang engine research institute	A0215
4	14:45-15:00	Research on the Quantitative Method for Performance Dispersion of Turbofan Engines Xingbang Jia, Jiyuan Zhang, Hailong Tang, Jingmei Cong, Min Chen Beihang University	A0418
Break 15:00-15:20			
Session5-7 Engines-7, Room: Meeting Room B 会议室 B			
Chair: Nicholas Bardell , RMIT University			
1	15:20-15:35	Numerical simulation analysis and efficiency evaluation for skin friction reduction by boundary layer injection Zhenming Qu, Feiteng Luo, Yaosong Long, Wenjuan Chen Huazhong university of science and technology	A0249
2	15:35-15:50	A three-dimensional compressible mixing layer model under skewed pressure-gradient and its linear instability Zhiyong Liu China Academy of Aerospace Aerodynamics	A0509
3	15:50-16:05	Design and development of ground test benches for aircraft electric propulsion systems Shuhao Deng, Tao Lei, Xingyu Zhang, Xiaobin Zhang Electrical engineering Department of the Automation School Northwestern Polytechnical University	A0412
4	16:05-16:20	Investigation of Influence of Reverse Vortex Flow on Thermal Characteristics of Microwave Electrothermal Thruster via Multi-Objective Design Optimization Tsubasa Ozawa Kyushu University	A0455
5	16:20-16:35	A conceptual sizing method and energy management strategy for hybrid-electric aircraft Li Li, Lei Qiao, Jiakuan Xu, Min Chang, Junqiang Bai School of Aeronautics, Northwestern Polytechnical University	A0102

Track 6 (Meeting Room 1 会议室 1)**P.M. Oct 16th**

Session6-1 CFD-8, Room: Meeting Room 1 会议室 1

Chair: **Tianhang Xiao**, Nanjing University of Aeronautics & Astronautics

1	14:00-14:15	Study on the Drag of Aircraft Auxiliary System according to the Arrangement of Ram Air Turbine	A0710
		Byoungsoo Kim, Hojun Jang, Hoonjae Kim	
		Chungnam National University	
2	14:15-14:30	Enhanced Least Squares Method for Curved Multi-Cloud Point Systems with Geometric Weight Function Control	A0642
		Sangwoo Lee, KyuHong Kim	
		Seoul National University	
3	14:30-14:45	Numerical Investigation of Pitch Characteristics Based on Circulation Control Technology	A0684
		Wang Ruiwen, Huang Xudong	
		Tsinghua University	
4	14:45-15:00	A Numerical Explorations of Passive Control of Transonic Flow over a Backward-Facing Step	A0657
		Kai Zeng, Xiang Shen, Liming Yang	
		AVIC Aerodynamics Research Institute, Northumbria University	

Break 15:00-15:20

Session6-2 Acoustics, Room: Meeting Room 1 会议室 1

Chair: **Xiaowei Gao**, Dalian University of Technology

1	15:20-15:35	Aero-acoustical optimization of a high-lift device based on hybrid RANS-LES method	A0145
		Zhen Wang, Lu Xie, Yiju Deng	
		AVIC Xian Aircraft Design Institute	
2	15:35-15:50	Optimization of the air-supply location for both reduction of the noise from environmental control systems and improvement of the air distribution in aircraft cabins	A0158
		Yun Wei, Yinshi Zhou	
		Civil Aviation University of China	
3	15:50-16:05	Aerodynamics and Aeroacoustics Optimization of Rotor Blade Tip in Hover	A0398
		Yufan Bi, Xu Zhao	
		Northwestern Polytechnical University	
4	16:05-16:20	Effect of UAV Configuration on Noise: Experimental Investigation and analysis	A0477
		Longzhi Zhao	
		Meituan	
5	16:20-16:35	Numerical study on noise reduction of four-engine propeller phase control	A0690
		Huixian He, Yue Wang	
		Northwestern Polytechnical University	

Break 16:35-17:00

Poster Time

A.M. Oct 17th

Session6-3 CFD-9 Room: Meeting Room 1 会议室 1

Chair: **Zhenghong Gao**, Northwestern Polytechnical University

1	8:30-8:45	Numerical Investigation of Riblets Drag Reduction using Large Eddy Simulation	A0666
		Dichen Li, Chuang Wei	
		AVIC ARI	
2	8:45-9:00	RANS-based Data Generation for Machine Learning to Develop Wall Interference Correction Method of Subsonic Wind Tunnel	A0683
		Hyeonwoo Hwang, DongHun Park, Myungsik Tai	

		Pusan National University	
3	9:00-9:15	CFD Discrete Error Estimation of Low-aspect-ratio Flying-wing Aircraft on Large Attack Angle	A0415
		Pengcheng Cui, Huan Li, Hongyin Jia, Xiaojun Wu, Jiangtao Chen, Jing Tang, Guiyu Zhou, Mingsheng Ma, Jun Gao, Wentong Cui	
		China Aerodynamics Research and Development Center	
4	9:15-9:30	Inverse Design Method of Pressure Distribution Using Variational Autoencoder	A0678
		Chao Song, Xiao Luo, Hongyang Liu, Yonggang Yu, Weibin Li	
		China Aerodynamics Research and Development Center	
Break 9:30-9:45			
Session6-4 CFD-10, Room: Meeting Room 1 会议室 1			
Chair: Li Li , AVIC Xi'an Aeronautics Computing Technique Research Institute			
1	9:45-10:00	The numerical investigation on the aerodynamic characteristics of a long-endurance UAV with low aspect-ratio	A0686
		Cheng Chen, Jiangtao Huang, Chengjun He, Xian Chen	
		China Aerodynamics Research and Development Center	
2	10:00-10:15	Unsteady Wake Flow Simulation of Multi-wings in a Schooling Using Viscous Vortex Particle Method	A0695
		Xiaoxuan Meng, Ziyi Xu, Zhongyuan Zheng, Min Chang, Junqiang Bai	
		Northwestern Polytechnical University	
3	10:15-10:30	Applying CFD Technology to Study the Influence of Variational Testing Layouts on Intake Flow Field Testing Results in a High-Pressure Compressor Total Pressure Intake Distortion Test	A0692
		Zhipeng Li, Bobo Jia, Bin Han, Mingming Huang, Di Xie	
		AECC Shenyang Engine Research Institute	
4	10:30-10:45	Optimization study of the effect of T-shaped circumferential groove casing treatment on transonic axial compressor stability	A0403
		Qinghan Li, Wuli Chu, Wenhao Liu, Jiezhong Dong	
		Northwestern Polytechnical University	
Break 10:45-11:00			
Session6-5 Aircraft Design-8, Room: Meeting Room 1 会议室 1			
Chair: Xiongwei Yang , Xi'an Jiaotong University			
1	11:00-11:15	A Comprehensive Design Method for Load, Stiffness, and Strength of High Altitude Long endurance UAV	A0312
		Yingyu Hou	
		China Academy of Aerospace Aerodynamics	
2	11:15-11:30	Numerical study on damage characteristics of composite propeller under blast impact load	A0327
		Xin Yao, Yang pei, Yuxeu Ge, Kefan Liu	
		Northwestern Polytechnical University	
3	11:30-11:45	Discrete Adjoint Method on three-dimensional dynamic meshes with local grid topology modification	A0599
		Yisheng Gao, Fei Qin, Jiajun Long	
		Nanjing University of Aeronautics and Astronautics	
4	11:45-12:00	Design Optimization of A Composite Fiber Reinforced Compressor Bling	A0148
		Tianzi Zhang, Yixiong Liu, Jia Li, Jie Guo, Qing Du	
		AECC Shenyang Engine Research Institute	
5	12:00-12:15	Streamline Fin Structure Design and Optimization Based on Simulation	A0675
		Liang Hu, Lanxin Liang	
		Nanjing Engineering Institute of Aircraft Systems	
P.M. Oct 17th			
Session6-6 Aircraft Design-9, Room: Meeting Room 1 会议室 1			
Chair: Myung-kwan Ahn , Changwon Moonsung University			

1	14:00-14:15	Identification of Key Factors Affecting the Safety Design of Aviation Piston Engine Based on Kriging-Sobol	A0304
		Guo Li, Yida Teng, Tongge Xu, Zilu Wang, Shuiting Ding	
		Beihang University	
2	14:15-14:30	Attitude Control of Lift-and-Cruise-Type eVTOL Using Observer-Based Sliding Mode Control	A0526
		Yunseob Kim, Jiwoo Choi, Hoijo Jeong, Dongsu Seon, Shinkyu Jeong, Jinyoung Suk, Seungkeun Kim	
		Chungnam National University	
3	14:30-14:45	Effect of Internal Flow on Generated Planform-Customized Waverider	A0059
		Chuanzhen Liu, Xufei Meng, Peng Bai	
		China Academy of Aerospace Aerodynamics	
4	14:45-15:00	Research on the method of constructing a meta-model for the civil aircraft design process	A0137
		Qiucen Fan, Wenhao Bi, Yunong Wang, Minghao Li, An Zhang	
		Northwestern Polytechnical University	
Break 15:00-15:20			
Session6-7 Aircraft Design-10, Room: Meeting Room 1 会议室 1			
Chair: Yue Wang , Northwestern Polytechnical University			
1	15:20-15:35	Trajectory Optimization and Guidance for Dynamic Soaring of Articulated Ornithopter	A0571
		Jungwook Hwang, Woongtaek Oh, Inrae Kim, Seungkeun Kim, Jinyoung Suk	
		Chungnam National University	
2	15:35-15:50	Smart Design and Optimization of a Universal and Low-cost Double-tailed UAV	A0096
		Lilong Luo, Liang Chang, Xiaohua Nie, Likai Wang, Wenjie Guo	
		Aircraft Strength Research Institute	
3	15:50-16:05	International Joint Development Methodology and Market Share of Single -aisle Aircraft in Asia-Pacific Countries	A0101
		Myung-kwan Ahn	
		Changwon Moonsung University	
4	16:05-16:20	An Efficient Distributed Propeller Configuration Calculation Method	A0111
		Chen Xue, Luo Wang, Kaiyang Zhang	
		AVIC The First Aircraft Institute	
5	16:20-16:35	Aerodynamic and Aero-acoustic Optimization for propeller by a Multi-Fidelity Approach	A0353
		Yingzhe Ye, Yu Liang	
		Southern University of Science and Technology, Beihang University	
Session6-8 CFD-11, Room: Meeting Room 1 会议室 1			
Chair: Byoungsoo Kim , Chungnam National University			
1	16:35-16:50	Three-dimensional Finite Volume Method with Walsh Basis Function using efficient adaptive algorithm	A0722
		Yuan Gan, Gang Wang, Jiong Ren, Xin Chen	
		Northwestern Polytechnical University School of Aeronautics	
2	16:50-17:05	Design and Calculation of Ventilation System for Civil Aircraft Landing Gear Compartment	A0743
		Chuang Li	
		shanghai aircraft design and research institute	
3	17:05-17:20	Optimization of aerodynamic performance of multistage axial flow compressor based on S2 analysis code	A0741
		bin li, hang xiang	
		School of Energy and Power Engineering, Beihang University	
4	17:20-17:35	A Numerical Investigation of Geometric Parameters of Ramp-Type Scramjet Inlet	A0735
		Sunoh Kang, Sung Ha Kwon, Donghun Park	

		Pusan National University	
5	17:35-17:50	Research on the Layout Planning Model of eVTOL Vertiport	A0491
		Yanhui Duan, Ning Sun	
		School of Systems Science and Engineering, Sun Yat-Sen University	

Track 7 (Meeting Room 2 会议室 2)

P.M. Oct 16th			
Session7-1 Structures and Materials-1, Room: Meeting Room 2 会议室 2			
Chair: Xiangfan Nie , Air Force Engineering University			
1	14:00-14:15	Thermal-Structural Analysis of Ablative TPS by Applying Domain/Boundary Decomposition Method	A0681
		Nara Han, Yerin Park, Boyoung Won, Eui Sup Shin	
		Jeonbuk National University	
2	14:15-14:30	Performance reliability and sensitivity analysis of an airplane cabin door retraction mechanism based on Sobol index	A0213
		Jingyi Liu, Shilong Xue, Xinchun Zhuang, Huan Pang	
		Chang'an University	
3	14:30-14:45	Analysis of structural characteristics of a tandem-wing layout vertical takeoff and landing UAV	A0328
		Junlei Sun, Chuenqi Li	
		Northwestern Polytechnical University	
4	14:45-15:00	Design and Analysis of Transmission Mechanism of Flapping-wing Micro Air Vehicles	A0431
		Cheng Cheng, Chongren Sun, chao zhou, Yanlai Zhang, Jianghao Wu	
		Beihang University	
Break 15:00-15:20			
Session7-2 Structures and Materials-2, Room: Meeting Room 2 会议室 2			
Chair: Junlei Sun , Northwestern Polytechnical University			
1	15:20-15:35	The Application of SHM in C919 Fatigue Testing	A0380
		Yu Yang, Binwen Wang, Xiaofeng Qi, Shuaishuai Lyu, Zhenhua Du	
		Aircraft Strength Research Institute	
2	15:35-15:50	The Prediction of Buckling Load of Liquid Filled Cylindrical Shell Using VCT	A0500
		Seung-Ah Oh, Mi-Yeon Lee, Hyun-Jun Cho, Yeon-Ju Kim, In-Gul Kim	
		Chungnam National University	
3	15:50-16:05	The Effect of Geometric Imperfection of a Pressurized Cylindrical Shell on Hybrid Vibration Correlation Technique	A0519
		Mi yeon Lee, Hyun-Jun Cho, Yeon-Ju Kim, Seung-Ah Oh, In-Gul Kim	
		Chungnam National University	
4	16:05-16:20	Compound repairing method of laser cladding and laser shock processing in thin TC4-DT titanium alloy component	A0656
		Xiangfan Nie, Yazhou Wang, Yang Li, Hongbing Li, Shiqian Li	
		Air Force Engineering University	
5	16:20-16:35	Band gap shift of solid-liquid phase change metamaterial considering liquid phase viscosity in scatterer	A0156
		Wenhan Yuan, Yijun Chai, Xiongwei Yang, Yueming Li	
		Xi'an Jiaotong University	
Break 16:35-17:00			
Poster Time			
A.M. Oct 17th			
Session7-3 Structures and Materials-3, Room: Meeting Room 2 会议室 2			
Chair: Vincent Ji , Universite Paris-Saclay			
1	8:30-8:45	A Micromechanical Model for Fiber Bridging in Multidirectional Composite Laminates	A0502
		Hyun-Jun Cho, Yeon-Ju Kim, Mi-Yeon Lee, Seung-Ah Oh, In-Gul Kim	
		Chungnam National University	
2	8:45-9:00	Reconstruction of random RVEs of the unidirectional composites with non-circular fibers using a conditional denoising diffusion model	A0585
		Seong-Won Jin, Myeong-Seok Go, Jae Hyuk Lim	

		Jeonbuk National University	
3	9:00-9:15	Residual strength evaluation of multi-site damage structures with irregular cracks	A0086
		Shaopu Su	
		Aircraft Strength Research Institute	
4	9:15-9:30	Establishment method for hard- α defect distribution curve of titanium alloy of aero-engine life-limited parts considering the effect of hot processing	A0472
		Guo Li, Junbo Liu, Huimin Zhou, Shuiting Ding, Haibin Ji, Yusheng Cai	
		Beihang University	
Break 9:30-9:45			
Session7-4 Structures and Materials-4, Room: Meeting Room 2 会议室 2			
Chair: Xitao Zheng , Northwestern Polytechnical University			
1	9:45-10:00	Zonal Finite Line Method in Structural Strength Analysis of Aerocrafts	A0052
		Xiao-Wei Gao	
		Dalian University of Technology	
2	10:00-10:15	Development of Type V Small Composite Propellant Tank	A0468
		Y.H. Yoon, S.Y. Rhee, M.K. Yi, K.S. Kim	
		Korea Aerospace Research Institute	
3	10:15-10:30	A Substructure-based Method to Evaluate the Structural Deformation	A0623
		Kunhui Huang, Changchuan Xie	
		Beihang University	
4	10:30-10:45	Experimental study of jet length effect on low frequency pressure fluctuation in an anechoic open-jet pilot wind tunnel	A0661
		Xiaoli Qu	
		China Aerodynamics Research and Development Center	
Break 10:45-11:00			
Session7-5 Structures and Materials-5, Room: Meeting Room 2 会议室 2			
Chair: Jae Hyuk Lim , Jeonbuk national university			
1	11:00-11:15	Numerical Simulation and Experimental Verification on the effects of Vibration Suppression of HPT Blades using Prism-type Under-Platform Dampers	A0077
		Yunwu Wu, Yixiong Liu, Xiangping Wang, Jia Li, Chuanyu Du	
		AECC Shenyang Engine Research Institute	
2	11:15-11:30	Analysis of propulsion/structural coupling characteristics of distributed propulsion wing	A0413
		Huailiang Fang, Zhou Zhou	
		Northwestern Polytechnical University	
3	11:30-11:45	Numerical and experimental investigation of the deployment stability of bistable composite tape springs	A0596
		Yeong-Bae Kim, Geun Sung Jung, Jae Hyuk Lim	
		Jeonbuk National University	
4	11:45-12:00	Title Numerical modeling and experimental validation of progressive failure considering delamination and lamina fracture in composite dovetail specimens under tensile loading	A0595
		Hong-Kyun Noh, Myeong-Seok Go, Jae Hyuk Lim, Yun-Hyuk Choi, Jong-Gu Kim	
		Jeonbuk National University	
P.M. Oct 17th			
Session7-6 Structures and Materials-6(organized), Room: Meeting Room 2 会议室 2			
Chair: Yueming Li , Xi'an Jiaotong University			
1	14:00-14:15	High-temperature DIC measurement of structural deformation under high-intensity blackbody radiation	A0238
		Xiongjie Che, Namseo Goo	
		KONKUK University	
2	14:15-14:30	The thermal conductivity coefficient of a quadrangle thermal cloak cell and a periodic plate	A0364

		Yanyan Sun, Yi-jun Chai, Xiong-wei yang, Yue-ming Li Xi'an Jiaotong University	
3	14:30-14:45	MORPHING SKINS BASED ON MIURA-ORIGAMI WITH VARIABLE STIFFNESS Jian Sun, Bin Li, Yanju Liu, Jinsong Leng Harbin Institute of Technology	A0744
4	14:45-15:00	A novel composite morphing skin based on elastic skeleton: conceptual design and parametric analysis Xintong Shi, Yu Yang, Yangchen Deng, Panpan Bao, Zhigang Wang Aircraft Strength Research Institute of China	A0464
Break 15:00-15:20			
Session7-7 Structures and Materials-7, Room: Meeting Room 2 会议室 2			
Chair: Jian Sun , Harbin Institute of technology			
1	15:20-15:35	Steady-state stress prediction of engine components using the state function method Wei Wang, Zhufeng Yue, Junfeng Zhang, Yixiong Liu, Yunwu Wu AECC Shenyang Engine Research Institute	A0109
2	15:35-15:50	Effect of machining parameters on the residual stress distribution and surface roughness in Ti-6-Al-4V alloy Guo Li, Huimin Zhou, Junbo Liu, Shuiting Ding, Yang Liu, Zonghui Liu Beihang University	A0433
3	15:50-16:05	Experimental and Numerical Modal Analysis of Aluminum Skin Stringer Panels at Increased Rivet Spacing Hae-Won Jang, Sang-Hyeon Seo Korea Aerospace Research Institute	A0462
4	16:05-16:20	Impact Analysis of Roll Maneuver Load about Civil Aircraft after Considering Control Law Wenbin Ruan, Zhongwu Yan, Xin Song Shanghai Aircraft Design and Research Institute, Shanghai 201210, China	A0469
5	16:20-16:35	Energy absorption analysis and testing of 3D braided composite tubes in aircraft crashworthiness Chunting Yu, Xitao Zheng, Leilei Yan, Chun Zhang Northwestern Polytechnical University	A0474

Track 8 (Meeting Room 3 会议室 3)

P.M. Oct 16th			
Session8-1 Air Mobility-1(organized), Room: Meeting Room 3 会议室 3			
Chair: Zhong Lei , Suwa University of Science			
1	14:00-14:15	Development and Application of a Calculation Program for the Landing Distance of Civil Aircraft	A0330
		Xiangyang Xu, Liangxing Li, Yue Teng, Zutao Xiang, Huagang Shi, Weicheng Qu, Guannan Chen, Fujuan Li	
		Xi'an Jiaotong University, China Eastern Airlines	
2	14:15-14:30	Development of 3-Dimensional Vn Diagram and Load Analysis Methodology for UAM Aircraft Considering Aircraft Certification	A0453
		WoonJae Won, KiJun Byeon, YunJae Noh, MinJi Kim, KwangWoong Choi, Jae-Woo Lee	
		Konkuk University	
3	14:30-14:45	4D Trajectory Prediction Method for UAM Aircraft Based on Flight Plan	A0489
		Chan Gwak, Jae-Woo Lee, HyeonJun Lee, Jeongseok Hyun, Aye Aye Maw	
		Konkuk Univ.	
4	14:45-15:00	Stability and control characteristics analysis and flight quality assessment of one stealth blended wing body aircraft	A0185
		Qing Li, YanLing Wang	
		Chinese Aeronautical Establishment	
Break 15:00-15:20			
Session8-2 Air Mobility-2(organized), Room: Meeting Room 3 会议室 3			
Chair: Deog-Kwan Kim , Korea Aerospace Research Institute			
1	15:20-15:35	Numerical Investigation of Flow and Flight Performance of Lift & Cruise type eVTOL Aircraft by a Panel Method	A0281
		Shin Hyodo, Zhong Lei	
		Suwa University of Science	
2	15:35-15:50	Fluid Simulation of Aerodynamic Interference of a Multicopter Type eVTOL Aircraft	A0280
		Karin Okawa, Zhong Lei	
		Suwa University of Science	
3	15:50-16:05	The Overview of Multi-Purpose Unmanned Helicopter(MPUH) Development with MTOW 200kg	A0461
		Deog-Kwan Kim, Deog-Kwan Kim	
		Korea Aerospace Research Institute	
4	16:05-16:20	Optimized power system layout focusing on UERF on eVTOL aircraft	A0170
		Haoran Zheng, Shuguang ZHANG, Ruichen HE, Florian Holzapfel	
		Beihang University	
5	16:20-16:35	Multiphysics Study of Swashplateless Propellers	A0470
		Yifei Zhang, Lu Liu, Longzhi Zhao, Tianming Zhao, Lijun Xu	
		Senior Aero Enginner	
Break 16:35-17:00			
Poster Time			
A.M. Oct 17th			
Session8-3 Sensors and Actuators-1, Room: Meeting Room 3 会议室 3			
Chair: Shaoming He , Beijing Institute of Technology			
1	8:30-8:45	Research On State Detection Method Of Complex System Based On Unknown Input	A0578
		Wei Niu	
		Xi'an Aeronautics Computing Technique Research Institute, AVIC	
2	8:45-9:00	Combined Filtering Algorithm for Electrical Performance Test Data based on Radome	A0120
		Dongwei Mao	

		AVIC Research Institute for Special Structures of Aeronautical Composite	
3	9:00-9:15	"Algorithm Research on Layout of Flow Field Measurement Points for Key Cross Sections in Aircraft Engines." Hao Yang, ChangZheng Li, MingYang Deng Northwestern Polytechnical University	A0402
4	9:15-9:30	In-flight Airflow Measurements for a High Maneuverability Ornithopter Zhihe Wang, Bifeng Song, Ang Chen, Kang Liu Northwestern Polytechnical University	A0738
Break 9:30-9:45			
Session8-4 Sensors and Actuators-2, Room: Meeting Room 3 会议室 3			
Chair: Baichun Gong , Nanjing University of Aeronautics and Astronautics			
1	9:45-10:00	Urban information aided target tracking with a small-scale UAV Jianduo Chai, Yue Hou, Shaoming He, Hyo-Sang Shin, Antonios Tsourdos Beijing institute of technology	A0358
2	10:00-10:15	Pose Tracking of a non-cooperative spacecraft using Template Matching with a Particle Filter Sangdo Park, Dongwon Jung Korea Aerospace University	A0518
3	10:15-10:30	Research on data reconstruction methods based on multiple models of aero-engine sensor Mingyang Deng, Changzheng Li, Hao Yang, Xiang Chen Northwestern Polytechnical University	A0375
4	10:30-10:45	Hardware-In-the-Loop Simulation Environment with a Robotic Arm for Multicopter Performance Evaluation Yuya Kawasaki, Takeshi Tsuchiya The University of Tokyo	A0287
Break 10:45-11:00			
Session8-5 Navigation, Room: Meeting Room 3 会议室 3			
Chair: Gaowei Jia , National University of Defense Technology			
1	11:00-11:15	A UAV Visual SLAM System for Post-disaster Emergency Mapping Zhaoxi Wong, Mengqi Zhang, Wenhao Bi Northwestern Polytechnical University	A0154
2	11:15-11:30	Learning-based Relative Navigation Simulation in Cooperative using ROS and Gazebo Woo Seok Song, Dae Woo Lee Pusan National University	A0716
3	11:30-11:45	A novel orbit maneuver detection method for space non-cooperative target using angles-only measurement Shihang Yang, Baichun Gong, Xing Ning, Yipeng Liu, Ziwen Wang Nanjing University of Aeronautics and Astronautics	A0184
4	11:45-12:00	A Strategy for Initial Orbit Determination of Lunar Navigation Satellite Based on Range and Doppler Measurements from a Lunar Ground Station Sungik Kim, Byungwoon Park Sejong University, South Korea	A0758
5	12:00-12:15	Swarm Flight of UAVs using Fast MCD algorithm Gunhyuk Lee, Hoijo Jeong, Seungkeun Kim, Jinyoung Suk Chungnam National University	A0719
P.M. Oct 17th			
Session8-6 Air Traffic Management-1(organized), Room: Meeting Room 3 会议室 3			
Chair: Mark Brown , Electronic Navigation Research Institute			
1	14:00-14:15	Study on the Cause of Air Traffic Delay in Fukuoka Approach Control Area Using CARATS Open Data Yasutaka Kawamoto, Shin-Ichiro Higashino, Yota Iwatsuki	A0180

		Kyushu University	
2	14:15-14:30	Quantifying the effects of COVID-19 on US Carriers engaged in International Aviation from 2020-2022 Nick Bardell RMIT University	A0246
3	14:30-14:45	Air Traffic Management for Arriving Aircraft using Propagating Waves Seiya Ueno, Yuki Ogawa, Takehiro Higuchi Yokohama National University	A0271
4	14:45-15:00	Optimizing Hydrogen-Powered Aircraft Fleet Operations: A Mixed Integer Optimization Approach with Carbon Emission Considerations Jiaxuan Wu, Xiaoqian Sun, Yifan Xu, Sebastian Wandelt Beihang university	A0089
Break 15:00-15:20			
Session8-7 Air Traffic Management-2, Room: Meeting Room 3 会议室 3			
Chair: Man Liang , RMIT University			
1	15:20-15:35	Generation of Optimized Trajectories for Congestion Mitigation in Fukuoka Approach Control Area Using Deep Reinforcement Learning Yota Iwatsuki, Yasutaka Kawamoto, Shin-Ichiro Higashino Kyushu University	A0239
2	15:35-15:50	Developing of the departure queueing model for a mixed takeoff/landing operational runway Daiki Iwata, Eri Itoh The University of Tokyo	A0162
3	15:50-16:05	Flight Time Prediction of Arrival Air Traffic Flows Following Time-based Airspace Concept Applying Machine Learning Methods Takuya Nishida, Eri Itoh The University of Tokyo	A0266
4	16:05-16:20	Analysis of air traffic time predictability for international ATFM Mark Brown, Keumjin Lee, Daekeun Jeon, Yanjun Wang, Hiroko Hirabayashi, Takashi Imuta, Naomi Hani Gray, Hongah Chai Electronic Navigation Reseach Institute	A0672
5	16:20-16:35	Model Predictive Trajectory Optimization for Urban Air Mobility Nakyeong Kim, Inrae Kim, Jinyoung Suk, Seungkeun Kim Chungnam National University	A0720
Session8-8 Air Traffic Management-3(organized), Room: Meeting Room 3 会议室 3			
Chair: Weijun Pan , Civil Aviation Flight University of China			
1	16:35-16:50	The Sustainable Management of International Air Mobility – Constrained by Climate Change Policies Raafat Saade, Hong Guan, Hao Liu Beijing Institute of Technology	A0750
2	16:50-17:05	En Route AMAN Design Toward Sustainable Arrival Traffic Operation Katsuhiko Sekine, Tomoaki Tatsukawa, Kozo Fujii, Eri Itoh Tokyo University of Science	A0488
3	17:05-17:20	An Improved Machine Learning Method to Speed Up the Trajectory Prediction: Taking Melbourne Airport as a Study Case Man Liang, Yuting Xi, Hongyan Zhang, Ji Ma, Daniel Delahaye, Zhengyi Wang RMIT Univerisity	A0698
4	17:20-17:35	Support Measures Optimization of Forest Firefighting for Special Aircraft Xiwen Zhang, Wenqing Yang Northwestern Polytechnical University	A0644
5	17:35-17:50	Evaluating Effectiveness of Fixed-flight Path Angle Descent to Kansai International Airport using A320 Flight Data via Machine Learning Approaches Yuki Nonaka, Eri Itoh	A0284

Track 9 (Meeting Room 5 会议室 5)

P.M. Oct 16th			
Session9-1 Aerodynamic Design and Optimization-1(organized), Room: Meeting Room 5 会议室 5			
Chair: Yisheng Gao , Nanjing University of Aeronautics and Astronautics			
1	14:00-14:15	Study on Aerodynamic Shape Optimization of Supersonic Low-boom Aircraft Considering Dynamic Effects	A0463
		Chuang Ma, Jiangtao Huang, Qisheng Chen, Gang Liu, Xian Chen	
		China Aerodynamics Research and Development Center	
2	14:15-14:30	Airfoil Optimization Of Wing-in-Ground Craft Considering Anti-waves Ability	A0528
		Wenping Song, Yiheng Wang	
		Northwestern Polytechnical University	
3	14:30-14:45	Multi-Objective Optimization Method for Propeller and Motor Size Selection in Electric Propulsion Systems for Unmanned Aerial Vehicles	A0499
		Tianming Zhao	
		Meituan	
4	14:45-15:00	Fluid-Structure Interaction Characteristic of Serpentine Nozzle	A0533
		Haibo zheng, Jiangtao Huang, Chengjun He, Xian Chen, Chao Gao	
		Northwestern Polytechnical University	
Break 15:00-15:20			
Session9-2 Aerodynamics-1, Room: Meeting Room 5 会议室 5			
Chair: Qiang Liu , National University of Defense Technology			
1	15:20-15:35	Magnus Moment Calculation of M910 Spinning Projectiles	A0074
		Lijun Xie, Tingting Zhang	
		CH UAV Science & Technology Co., Ltd.	
2	15:35-15:50	Unsteady aerodynamic prediction using limited samples based on transfer learning	A0226
		Wen Ji, Chunna Li, Xuyi Jia, Gang Wang, Chunlin Gong	
		Northwestern Polytechnical University	
3	15:50-16:05	Unsteady aerodynamic loads reduced-order modelling for shock-dominated flow with application on shock-induced panel flutter prediction	A0671
		Hao Zhou, Gang Wang	
		Northwestern Polytechnical University National Key Laboratory of Aerodynamic Design and Research	
4	16:05-16:20	Wall Pressure Fluctuations on a Cone-Cylinder Model at Transonic Regime	A0759
		Chang Liu, Chen Ji, Lei Zhao	
		China academy of aerospace aerodynamics	
5	16:20-16:35	Self-propulsive performance of tandem flapping-fixed airfoils at low Reynolds number: A case study	A0164
		Gang Li, Long Chen, Yanlai Zhang, Jianghao Wu	
		Beihang University	
Break 16:35-17:00			
Poster Time			
A.M. Oct 17th			
Session9-3 Aerodynamic Design and Optimization-2(organized), Room: Meeting Room 5 会议室 5			
Chair: Dongyu Zhu , AVIC Aerodynamics Research Institute			
1	8:30-8:45	Geometric uncertainty quantification and robust design of aero-engine blade profile	A0575
		Pengbo Zheng, Baotong Wang, Kai Zhou, Junying Wang, Xinqian Zheng, Yu Fu	
		Tsinghua University	

2	8:45-9:00	Sensitivity analysis of infrared radiation from tailless aircraft nozzle caused by incoming conditions	A0592
		Chengjun He, Jiangtao Huang	
		China Aerodynamics Research and Development Center	
3	9:00-9:15	Aerodynamic-Driven Topology Optimization of Compliant Morphing Airfoil Using Panel Method	A0730
		Keita Kambayashi, Kogiso Nozomu	
		Osaka Metropolitan University	
4	9:15-9:30	Air Inlet/Airframe Integration Optimization based on the Discrete Adjoint Method	A0588
		Bowen Shu, Jiangtao Huang	
		Northwestern Polytechnical University	
Break 9:30-9:45			
Session9-4 Aerodynamic Design and Optimization-3, Room: Meeting Room 5 会议室 5			
Chair: Yayun Shi , Xi'an Jiaotong University			
1	9:45-10:00	The airfoil optimization design of a large paraglider	A0670
		Xia He, Gang Yu	
		Aerospace Life-Support Industries Ltd. AVIC, Hubei University of Arts and Science	
2	10:00-10:15	Multi-Condition Robust Optimization Design of High Subsonic Cascades Considering the Uncertain Changes of Inlet Flow Condition	A0742
		Wuan Zhao, Hang Xiang	
		Beihang University	
3	10:15-10:30	Research on Aerodynamic Test at High Angle of Attack and Post-stall Reorientation Simulation for Air-to-Air Missiles	A0648
		Xiaoqiang Xu, Minmin Li, Lin Shen, Da Huang	
		Nanjing University of Aeronautics and Astronautics	
4	10:30-10:45	Dynamic Modeling of a Stratospheric HALE UAV	A0736
		Dongjun Shin, Chanku Han, Hoiho Jeong, Jinyoung Suk, Seungkeun Kim, Hyun-Sik Choi	
		Chungnam National University, Daejeon, South Korea	
Break 10:45-11:00			
Session9-5 Aerodynamics-2, Room: Meeting Room 5 会议室 5			
Chair: Yanlai Zhang , Beihang University			
1	11:00-11:15	Unsteady Aerodynamic Characteristics of Slender Body at Extra-high AOA	A0752
		Fangjian Wang	
		China Academy of Aerospace Aerodynamics	
2	11:15-11:30	Research on Fluctuating Pressure of Transonic Rocket Based on IDDES Turbulence Model	A0755
		Yongde Li, Chen Ji	
		China Academy of Aerospace Aerodynamics	
3	11:30-11:45	High Fidelity Simulation on Fluid-Structural Interaction of Hammerhead Vehicle with Transonic Buffeting Flow	A0737
		Mengzhu Qin, Gang Wang	
		Northwestern Polytechnical University School of Aeronautics	
4	11:45-12:00	Analysis of Trim and Rotor/Wing Interference Characteristics of High-Speed Composite Helicopter in Hover	A0405
		Linyan Huang, Xu Zhao	
		Northwestern Polytechnical University	
5	12:00-12:15	Propulsion performance of multiple pitching-heaving airfoils in side-by-side configurations	A0342
		Kai Wang, Long Chen, Yanlai Zhang, Jianghao Wu	
		Beihang University	
P.M. Oct 17th			
Session9-6 Aircraft Design-11, Room: Meeting Room 5 会议室 5			

Chair: Cyrille Breard , COMAC Shanghai Aircraft Design and Research Institute			
1	14:00-14:15	Backstepping Sliding Mode Control of UAM Aircraft Under Urban Wind Environments	A0729
		Jiwoo Choi, Yunseob Kim, Hoiho Jeong, Dongsu Seon, Jinyoung Suk, Seungkeun Kim, Shinkyu Jeong, Tae Sik Kim	
		Chungnam National University	
2	14:15-14:30	Continuous Modeling in Aircraft Mission Analysis and Simulation	A0149
		Yuchen Zhang	
		Chinese Aeronautical Establishment	
3	14:30-14:45	Study on Influence of Inner Root Shape of Slat on the Aerodynamic Performance of High-lift System	A0159
		Mengying Chen	
		COMAC Shanghai Aircraft Design and Research Institute	
4	14:45-15:00	Switchblade: Design and Performance Analysis of a Precision Strike Weapon	A0068
		Lijun Xie, Tingting Zhang	
		CH UAV Science & Technology Co., Ltd.	
Break 15:00-15:20			
Session9-7 Flight Simulation, Room: Meeting Room 5 会议室 5			
Chair: Yanjie Shen , AVIC Aerodynamics Research Institute			
1	15:20-15:35	Remote Eyewitness to Flight Test for Validation Type Certification	A0081
		Faliang Wang	
		Xi'an Aircraft Airworthiness Certification Centre, Civil Aviation Administration of China	
2	15:35-15:50	Dynamic simulation of cable system based on Kane method with an adaptive segmentation algorithm	A0603
		Jian Shen, Lei Qiao, Jiakuan Xu, Junqiang Bai	
		Northwestern Polytechnical University	
3	15:50-16:05	Preliminary Investigation for Human Flight Stability in Wearable Aviation System	A0747
		Keita Kimura, Daichi Wada, Hiroto Tanaka, Aoi Izumi	
		Japan Aerospace Exploration Agency	
4	16:05-16:20	Experimental researches on electric thermal anti-icing performance and runback icing	A0173
		Dongyu Zhu, Runan Pei, Zhansen Qian, Li Yuan	
		Liaoning Provincial Key Laboratory of Aircraft Ice Protection, AVIC Aerodynamics Research Institute	
5	16:20-16:35	Experimental Study of Icing and Anti-Icing for Pitching Airfoil	A0607
		Yuan Wu, Lingsong Xu, Chenglin Tian, Dongyu Zhu, Chunling Zhu, Fukun Zhang	
		AVIC Aerodynamics Research Institute	
6	16:35-16:50	Mesh Impact Analysis of Eulerian Method for Droplet Shadowed Zone of Aircraft Icing	A0611
		Wenzhao Zhao, Xiaobin Shen	
		Beihang University	

Track 10 (Meeting Room 6 会议室 6)**P.M. Oct 16th**

Session10-1 Wind Tunnel Testing-1(organized), Room: Meeting Room 6 会议室 6

Chair: **Zhansen Qian**, AVIC Aerodynamics Research Institute

1	14:00-14:15	Skin-Friction Topology on Axisymmetric Boattail Models by an Optical-Flow Algorithm with a Sub-grid Function	A0093
		Gopal Sharma	
		Kyushu University	
2	14:15-14:30	Investigation of Flow Field and Performance of a Tandem Flapping Wing Micro Air Vehicle	A0354
		Ryosei Azuma	
		Nagaoka University of Technology	
3	14:30-14:45	Research on Flight Test Techniques of Single Runway Aircraft Minimum Take-off Time Interval	A0370
		Lu Qiu, ZhiYi Li	
		Chinese Flight Test Establishment	
4	14:45-15:00	A real-time flow pattern visualization based on linear stability theory	A0432
		Jie Ren	
		Beijing Institute of Technology	

Break 15:00-15:20

Session10-2 Wind Tunnel Testing-2(organized), Room: Meeting Room 6 会议室 6

Chair: **Yongfei Cao**, AVIC Aerodynamics Research Institute

1	15:20-15:35	Low Speed Wind Tunnel Test Method and Structural Function Verification of Variable Camber Wing Leading Edge Full Scale Prototype	A0194
		Chunpeng Li, Chunpeng Li	
		AVIC ARI	
2	15:35-15:50	Experimental Investigation of Model Deformation on A High Aspect Ratio Aircraft at Transonic Speeds in ETW	A0245
		Yulong Ba, Ying Chen	
		Shanghai Aircraft Design and Research Institute of COMAC	
3	15:50-16:05	Aerodynamic Test Study on Slender Air Vehicle at Extra-wide Angle-of-attack	A0757
		Zhiyang Zhang, Yuhui Song, Jin Liu, Fangjian Wang	
		China Academy of Aerospace Aerodynamics	
4	16:05-16:20	Wind Tunnel Model Static Aeroelastic Deformation Correction Method Based on Grid Reconstruction	A0217
		Kai Chen, Dawei Wu, Pan Cheng, Kun Mao, Ying Chen	
		Shanghai Aircraft Design & Research Institute	
5	16:20-16:35	Experimental study of wall temperature effect on hypersonic aerothermal environment	A0269
		Xinguo Sha, Deqiang Zeng, Jian Lin, Feng Ji, Shiwei Li	
		China Academy of Aerospace Aerodynamics	

Break 16:35-17:00

Poster Time

A.M. Oct 17th

Session10-3 Wind Tunnel Testing-3, Room: Meeting Room 6 会议室 6

Chair: **Tihao Yang**, Northwestern Polytechnical University

1	8:30-8:45	Flow Visualization of Lifting Body by Phosphorescence Thermography	A0302
		Rui Ye, Suozhu Wang, Wen ling Liu, Xin Jin	
		China Academy of Aerospace Aerodynamics	

2	8:45-9:00	Phosphor Thermography for Global Heat Transfer Measurement in High-Enthalpy Shock Tunnel FD-21	A0311
		Guangsen Jia, Xin Jin, Feng Ji, Nong Chen, Xing Chen	
		China Academy of Aerospace Aerodynamics	
3	9:00-9:15	Real-time synchronous measurement of three-dimensional motion trajectory and heat flux in shock wind tunnel	A0480
		Zhan Liu, Nong Chen	
		China academy of aerospace aerodynamics	
4	9:15-9:30	Design and Analysis of Low Enthalpy Total Temperature Probe	A0329
		Zhu Xiaojun, Chen Zhenhai, Zhang Rongguo, Ou Dongbin	
		China Academy of Aerospace Aerodynamics	
Break 9:30-9:45			
Session10-4 Wind Tunnel Testing-4, Room: Meeting Room 6 会议室 6			
Chair: Iijima Hidetoshi , Japan Aerospace Exploration Agency			
1	9:45-10:00	Experimental Technique and Verification for Telescopic Morphing Aircraft in Wind Tunnel	A0510
		Deqiang Zeng, Feng Ji, Xinguo Sha, Riming Sun, Rui Ye	
		China Academy of Aerospace Aerodynamics	
2	10:00-10:15	Measurement of Aerodynamic Passive Twisting in Lattice-Structured Propeller Blades via Wind Tunnel Tests	A0517
		Ju-Hoe Kim, Yuta Nishijima, Yuta Yaguchi, Takeshi Tsuchiya	
		The University of Tokyo	
3	10:15-10:30	Aft-body Jet Effects Testing Technique based on Cassette Strain Gauge Balance in Wind Tunnel	A0514
		Deqiang Zeng, Jian Lin, Xinguo Sha, Xiangyu Yi, Feng Ji, Ruiqu Li	
		China Academy of Aerospace Aerodynamics	
4	10:30-10:45	Research on A Semi-Model Measurement Method for Ventilation Models	A0532
		Feng Xie	
		China Academy of Aerospace Aerodynamics	
Break 10:45-11:00			
Session10-5 Wind Tunnel Testing-5, Room: Meeting Room 6 会议室 6			
Chair: Jong-Seob Han , Chungnam National University			
1	11:00-11:15	The roll dynamic instability mechanism and deformed wing improvement	A0065
		Nong Chen	
		China Academy of Aerospace Aerodynamics	
2	11:15-11:30	Preliminary Study of High Mach Arc Aerodynamic Test Wind Tunnel	A0072
		Tingting Zhang	
		China Academy of Aerospace Aerodynamics	
3	11:30-11:45	Preliminary Exploration of Hypersonic Wind Tunnel Inlet Test Method	A0073
		Tingting Zhang, Lijun Xie	
		China Academy of Aerospace Aerodynamics	
4	11:45-12:00	An improved model of free piston compressor considering entropy change	A0614
		Xiangyu Yi, Dapeng Yao, Junmou Shen, Xing Chen, Zhixian Bi	
		China Academy of Aerospace Aerodynamics	
P.M. Oct 17th			
Session10-6 Wind Tunnel Testing-6, Room: Meeting Room 6 会议室 6			
Chair: Long Qiao , AVIC Aerodynamics Research Institute			
1	14:00-14:15	Adaptive Partitioning of Nonlinear Aerodynamic Data with Interpretable Sparse Mixture-of-experts Model	A0621

		Wei Wei, Bihe Xu, Wanfang Yan, Liao GengYang China Academy of Aerospace Aerodynaics	
2	14:15-14:30	Alternative Force Measurement for Flapping Plates in Wind Tunnel Jong-Seob Han Chungnam National University	A0688
3	14:30-14:45	Experimental investigation of low power electro-thermal ice protection system Pei Runan AVIC Aerodynamics Research Institute	A0637
4	14:45-15:00	The Numerical and Experimental Research on Supersonic Parallel Separation Han Qin, Lan Chen China Academy of Aerospace Aerodynamics	A0753
Break 15:00-15:20			
Session10-7 Wind Tunnel Testing-7, Room: Meeting Room 6 会议室 6			
Chair: Liangjie Gao , AVIC Aerodynamics Research Institute			
1	15:20-15:35	Study on the Influence of Outbound Angle on the Backward Separation Motion of Buried Vehicle Wei Lu, Zenghui Jiang China Academy of Aerospace Aerodynamics	A0754
2	15:35-15:50	Design and Integration of a Network-based Testing System for a Full-scale Turbine Test Rig Xiaotao Yu AECC Shenyang Engine Research Institute	A0572
3	15:50-16:05	A Semi-physical Simulation Method for Wind Tunnel Simulation of Aircraft Rolling Maneuver Separation Shuai Wang, Feng Xie China Academy of Aerospace Aerodynamics	A0580
4	16:05-16:20	Design and Analysis of a Wing Twist Mechanism for Flapping Wing Ornithopter Seongjin Kim, Jungwook Hwang, Woongtaek Oh, Inrae Kim, Jinyoung Suk, Seungkeun Kim Chungnam National University	A0700