Track 1　Shu Han Room (3rd Floor)

Oct. 16　P.M.

Session1-1　CFD applications 1　Chair: Prof. Koji Miyaji

Time	Title / Authors / Affiliation	ID
13:30-13:45	Numericial investigation of ice accretion effects at supercooled large droplet conditions Jitong Wang,Weimin Sang,Tian Lu Northwestern Polytechnical University	1031127
13:45-14:00	Investigation of the Hypersonic Turboramjet Pre-Cooler by using a Controllable Porous Media Structure Xiao Yu AECC	1061745
14:00-14:15	The Simulation of Compressor Performance of Inlet Distortion Using Split Actuator Disk Model Bohan Zhang,Qiang Wang,Haiyang Hu,Yahua Zhang BeiHang University > School of Energy and Power Engineering	1061819
14:15-14:30	Impact of MPF Aeroshell Configuration on Static Instability at Small Angle of Attack Junming Lyu,WenBo Miao,Fei Huang,XiaoLi Cheng China Academy of Aerospace Aerodynamics	1030634
14:30-14:45	Numerical Study of A Hydrodynamic Benchmark Model for Seaplanes Using OpenFOAM(v2) Xupeng Duan[1],Weiping Sun[2],Cheng Chen[3],Meng Wei[2],Yong Yang[1] 1.Northwestern Polytechnical University 2.AVIC General Aircraft Research Institute 3.Low Speed Aerodynamics Institute	1081706

Session1-2　CFD applications 2　Chair: Prof. Koji Miyaji

Time	Title / Authors / Affiliation	ID
14:45-15:00	Aerodynamic and Aeroelastic Analysis of Flying Wing with Split Drag-Rudder Wei Xu,Min Xu,Xiaomin An Northwestern Polytechnical University	1061847
15:00-15:15	Radiation heating analysis of hypersonic re-entry spacecraft Jingke Hao,Liang Zhang,Junming Lyu,Bangcheng Ai China Academy of Aerospace Aerodynamics	1060575
15:15-15:30	Numerical Investigation on Altitude Static Pressure Tapping Location Design of a Reentry Capsule Zhang Zhang[1],Liwu Wang[1],Wei Huang[1],Jiangli Lei[1],Rui Zhao[2] 1.Beijing Institute of Space Mechanics and Electricity 2.Beijing Institute of Technology	1060477
15:30-15:45	Numerical Simulation of the Effect on External Store Separation in Helicopter Flow Field Aoxiang Qiu,Weimin Sang,Shaohua Hu School of Aeronautics，Northwestern Polytechnical University	1062114
15:45-16:00	Flush air data sensing system design and test for supersonic vehicle Guangqiang Chen,Xiuxin Dou,Guohui Dou,Weijiang Zhou,Yunjun Yang China Academy of Aerodynamic of Aerospace	1018202

Session1-3　CFD applications 3　Chair: Prof. Zhenxun Gao

Time	Title / Authors / Affiliation	ID
16:00-16:15	Aerodynamic Loads Analysis for a Maneuvering Aircraft in Transonic Flow Hui Zhang The First Aircraft Research Institute of AVIC	1048935
16:15-16:30	Effet of Slip Flow on Aerodynamics Fei Huang,Xuhong Jin,Guoxi Han,Xiaoli Cheng China Academy of Aerospace Aerodynamics	1033754
16:30-16:45	Effects of distributed propellers slipstream on aerodynamic characteristics of wing Shiwei Zhao,Dajun Xu Beihang University School of Astronautics	1061045
16:45-17:00	Sting Interference of Dynamic Derivatives for Flying Wing in Transonic Fangjian Wang,Lan Chen,Jing Hu,Han Qin,Yuhui Song China Academy of Aerospace Aerodynamic(CAAA)	1027086

Session1-4　CFD applications 4　Chair: Mr. Tatsunori Yuhara

Time	Title / Authors / Affiliation	ID
17:15-17:30	Separation characteristics of embedded weapons with flow control measures Jia Lian,Jun Qiang Ai,Lu Xie AVIC Xi'an Aircraft Design Institute	1036186
17:30-17:45	Sonic boom estimation using CFD solutions Zhiyong Liu,Fengxue Qian,Zhao Zhang,Yang Tao,Yang Yang China Aerodynamics Reseach and Development Center	1035750
17:45-18:00	Support Interference Computations of Forced Oscillation Test for a Flying-Wing Dynamic Model Wu Jiali,Feng Shuai,Wang Yanling,Shen Yanjie,Bu Chen AVIC Aerodynamic Research Institute	1062579
18:00-18:15	Influences of Multi-factors on Supercooled Large Droplet Splashing Characteristics Weihao Li,Weibin Li,Xian Yi,Yingyu Wang China Aerodynamics Research and Development Center	1055690
18:15-18:30	Monte Carlo simulation for low-density hypersonic flows past two- and three-dimensional cavities Xuhong Jin China Academy of Aerospace Aerodynamics	1062082

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Session1-5　Aerodynamics optimization 1　Chair: Mr. Ayumu Inasawa

Time	Title / Authors / Affiliation	ID
8:30-8:45	Numerical Investigation on Arbitrary Polynomial Blade Model for a Transonic Axial-flow Compressor Rotor with Multi-Parameter Optimization Xuning Zhao,Jinxin Chen,Xuhui Zhou,Jiang Chen Beihang university	1059997
8:45-9:00	A Study of Hybrid Airfoil Design Method Lei Yu,Long Yang,Dongyu Zhu AVIC Aerodynamic Research institute	1030061
9:00-9:15	Application of Aerodynamic Optimization in a Multi-Fidelity Distributed Overall Aircraft Design System Xiangyu GU CASC	1063420
9:15-9:30	Multipoint and Multi-Objective Optimization of Airfoil Considering Boundary Layer Ingestion Rubing Ma,Jianghao Wu	1062008

	Beihang University	
	Session1-6 CFD applications5 Chair: Mr. Ayumu Inasawa	
9:45-10:00	Two-dimensional aerodynamic loads of Space Shuttle thermal protection system considering steady internal flow Yupeng Feng[1],Wei Xia[2] 1.Chengdu Aircraft Industrial (Group) Co.，Ltd 2.State Key Laboratory for Strength and Vibration of Mechanical Structures，Xi'an Jiaotong University	1036033
10:15-10:30	Uniform Aero-Heating Flux Design for a Hypersonic Blunt Body Jiatong Shi,Ketian Shi,Liang Zhang China Academy of Aerospace Aerodynamics	1062127
10:30-10:45	The swept and leaned blade influence on the aerodynamic performance of a transonic axial compressor rotor Nianzhou Huang,Xu Zhao Northwestern Polytechnical University	1058947
	Session1-7 CFD applications6 Chair: Mr. Tao Yang	
11:00-11:15	Numerical Study of the High-Lift Aerodynamic Characteristics of Dropped Hinge Flap Coupled with Drooped Wenhu Wang,Cyrille Breard,Yifeng Sun Shanghai Aircraft Design and Research Institute	1054226
11:15-11:30	The Engine Position Effect on SWB Airplane Aerodynamic Performance Gang Yu,Dong Li,Yue Shu Northwestern Polytechnical University	1050338
11:30-11:45	An Engineering Correction Method of Static Aeroelasticity and Reynolds Number Effect on Wind Tunnel Pressure Distribution Kun Mao,Fei Xue,Feng Bai,Dongyun Zhang,Meihong Zhang COMAC	1032925
11:45-12:00	Application of a Throughflow Model Based on Circumferentially Averaged Navier-Stokes Equations in Transonic Fans Analysis Hailiang JIN[1,2],Daobin QIU[1,2],Yueqian YIN[1,2] 1.AECC Hunan Aviation Powerplant Research Institute 2.Hunan Key Laboratory of Turbomachinery on Small and Medium Aero-Engine	1061743
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	Session1-8 Icing and Anti-icing Chair: Dr. Chunhua Xiao	
13:30-13:45	Ice Accretion Simulation Based on Roughness Extension of Shear Stress Transport k-omega Turbulence Tong Liu,Jinsheng Cai,Kun Qu Northwestern Polytechnical University	1059276
13:45-14:00	Design and verification of thermal load for electrothermal ice protection system Peng Li,Yuanli Kang,Yupeng Song,Xunan He,Zuoming. Qu COMAC Beijing Aeronautical Science & Technology Research Institute	1055347
14:00-14:15	Research on Numerical Simulation of Glaze Ice for Aircraft and Aero-engine Entry Components Jing Li,Zheng-xia Liu,Li-fen Zhang,Jian-ping Hu Northwestern Polythenical University	1060672
14:15-14:30	Numerical Simulation of Flow Field around an Iced Airfoil Using Lattice Boltzmann Method Hongyu Gu[1],Weimin Sang[1],Yang Cai[2] 1.School of Aeronautics，NPU 2.AVIC the first aircraft institute，Xi'an	1027779
	Session1-9 Scheme and algorithm 1 Chair: Prof. Zhenghong Gao	
14:45-15:00	Application of An Improved Preconditioning Boundary Condition to Simulation of Tiltrotor Aircraft in Hove Huan Li, Naichun Zhou, Xiaoquan Gong,Jiangtao Chen ,Youq Deng China Aerodynamics Research and Development Center	1163869
15:00-15:15	Compressible Flow Simulation using a High Order Least Squares Method with Geometric Conservation Law JIN YOUNG HUH,KYU HONG KIM Seoul National University	1012706
15:15-15:30	Predictions of Heat Transfer in Hypersonic Viscous Flows by an Improved Third-order WENO Scheme Chen Li[1,2],Qin Li[1,2],Hanxin Zhang[1,2] 1.State Key Laboratory of Aerodynamics，China Aerodynamics Research and Development Center 2.Computational Aerodynamic Institute，China Aerodynamics Research and Development Center	1062149
15:30-15:45	A Discontinuous Galerkin Method on Arbitrary Grids with High Order Boundary Discretization Penghui Su,Liang Zhang China Academy of Aerospace Aerodynamics	1034917
	Session1-10 Scheme and algorithm 2 Chair: Prof. Zhenghong Gao	
16:00-16:15	New Multi-dimensional Limiter for Finite Volume Discretizations on Unstructured Meshes Liang Zhang,Bangcheng Ai,Zhi Chen China Academy of Aerospace Aerodynamics	1058009
16:15-16:30	Modeling of Turbulence Drag Reduction with Riblets Jian ZHOU,Ping OU,Wei WEI China Academy of Aerospace Aerodynamics	1057716
16:30-16:45	An Improved Tri-linear Interpolation Method for Hybrid Overset Grids and Its Application Pengcheng Cui,Bin Li,Jing Tang,Xiaoquan Gong,Mingsheng Ma China Aerodynamics Research and Development Center	1051634
16:45-17:00	A Fully-local Transition Prediction Model for High-turbulence Disturbance Environment Min Chang[1],Jiakuang Xu[2],Junqiang Bai[1] 1.Unmanned System Research Institute，Northwestern Polytechnical University 2.Center for Applied Mathematics，Tianjin University	1061764
	Session1-11 Scheme and algorithm 3 Chair: Prof. Zhenghong Gao	
17:15-17:30	Treatment of Discontinuity in Intrusive Polynomial Chaos for Uncertainty Quantification of a Nozzle Flow in CFD Koji Miyaji,Takumi Inoue	1062075

	Yokohama National University	
17:30-17:45	On numerical shock instability of low diffusion shock-capturing schemes Wenjia Xie,Ye Zhang,Ran Zhang,Hua Li National University of Defense Technology	1062056
17:45-18:00	Fluid-Structure Interaction Analysis Using Meshless Method Sang Woo Lee,Jin Young Huh,Kyu Hong Kim Seoul National University	1061814
18:00-18:15	Towards an accurate and robust rotated Riemann solver for hypersonic flow computations Ye Zhang,Hua Li,WJ Xie,Ran Zhang National University of Defence technology	1063606

Track 2　Shu Feng Room (3rd Floor)

Oct. 16 P.M.

	Session2-1 Flow control and mechanism 1　Chair：Prof. Kenichi Rinoie	
13:30-13:45	Research on Hypersonic Boundary-Layer Stability with High-Temperature Effects Xianliang Chen[1], Pietro Carlo Boldini[2] and Song Fu[1] 1 Tsinghua University, Beijing 100084, China 2 Institute of Aerodynamics and Gas Dynamics, University of Stuttgart, 70550 Stuttgart, Germany	线下提交
13:45-14:00	Parameter Sensitivity Analysis and Rapid Performance Calculation for High Bypass Ratio Separate Flow Exhaust System Huicheng Yang[1],Qingzhen Yang[1],Yongqiang Shi[1],Canliang Wang[2] 1.Northwestern Polytechnical University 2.Aviation Motor Control System Institute	1061156
14:00-14:15	Effect of active flow control near the inlet on performance on S-duct Jihyeong Lee[1],Shichao Zhang[1],Cheolheui Han[2],Jinsoo Cho[1] 1.Hanyang University 2.Korea National University of Transportation	1046467
14:15-14:30	Investigation into the effect of secondary jet on aerodynamic performance of dual throat thrust vectoring nozzles Jingyu He,Qiang Chen ,Jingang Dong,Yali Tang China Academy of Aerospace Aerodynamics	1041360
	Session2-2 Flow control and mechanism 2　Chair：Prof. Kenichi Rinoie	
14:45-15:00	Shock bifurcation phenomenon in the reflected shock/boundary layer interaction Yang Zhang,Zhenhai Ma,Jianfeng Zou,Yao Zheng Center for Engineering and Scientific Computation	1040750 NO SHOW
15:00-15:15	Effect of the Stator Twist Angle on the Dual Type Combined Fan Jiho Moon,Jinsoo Cho Hanyang University	1061912 NO SHOW
15:15-15:30	Flow characteristics of centrifugal compressor stage under low Reynolds number Yuxin Ni,Jie Chen,Xin Fu,Guoping Huang,Zhiming Zhang,Rui Zhu Nanjing University of Aeronautics and Astronautics	1029797
15:30-15:45	Numerical Simulation of Ice Ridge and Effects of NSDBD Plasma Actuator on Ice Ridge Junjie Niu[1],Weimin Sang[1],Yunze Jia[2] 1.School of Aeronautics，Northwestern Polytechnical University 2.Shannxi Zhongtian Rocket Technology Co.Ltd	1025691
	Session2-3 Flow control and mechanism 3　Chair：Prof. Heyong Xu	
16:00-16:15	Laminar transition over airfoil: numerical simulation of turbulence models and experiment validation Shuyue Wang[1],Gang Sun[1],Meng Wang[2],Xinyu Wang[1] 1.Fudan University 2.AVIC Aerodynamic Research Institute	984817
16:15-16:30	Two-dimensional Simulation Study on Aerodynamic Drag Reduction Characteristics of Superhydrophobic Run Pang,Weimin Sang,Yang Cai School of Aeronautics	1031871
16:30-16:45	Numerical Investigation of RCS Jet Interaction on a Hypersonic Vehicle Yuwei Liu,Zheng Chen,Yaofeng Liu China Academy of Aerospace Aerodynamics	1065006
	Session2-4 Flow control and mechanism 4　Chair: Prof. Heyong Xu	
17:15-17:30	Numerical study of Görtler vortices on hypersonic boundary-layer transition Min Yu,Wubing Yang,Xiangjiang Yuan China Academy of Aerospace Aerodynamics	1035867
17:30-17:45	Numerical Investigation of Plasma Flow Control over a Flat Plate Yuqi Qin,Haoyu Chen,Zhengchao Xiang,Xuanshi Meng Northwestern Polytechnical University	1061979
17:45-18:00	NSDBD induced Local Perturbations in Flat Plate Supersonic Laminar Boundary Layers Ke Song Northwestern Polytechnical University	1060583
18:00-18:15	Numerical study of hypersonic laminar interaction induced by the swept blunt fins Yaofeng Liu,Jikui Ma China Academy of Aerospace Aerodynamics	1056969
18:15-18:30	Study on Flow Characteristics of Compressible Laminar Flow Boundary Layers Min Chang[1],Ziyuan Fu[2],XiaoXuan Meng[3] 1.Unmanned System Research Institute，Northwestern Polytechnical University 2.China Academy of Launch Vehicle Technology 3.School of Aeronautics，Northwestern Polytechnical Univeristy	1058612
	Oct. 17 A.M.	
	Session2-5 Wind tunnel 1　Chair: Mr. Zhong Lei	
8:30-8:45	Mach Number Control for Continuous Mode Tests in Wind Tunnel using Feed Forward Algorithm JIN GUO[1,2],CAO YANG[1,2],ZHANG REN[1,2],CUI XIAOCHUN[1,2] 1.Aerodynamics Research Institute of AVIC 2.Aviation Technology Key Laboratory of Aerodynamics Research in High-Speed and High Reynolds	1001012
8:45-9:00	Experimental Study of the Vector Nozzle Performance Using Calibration Tank Runsheng He,Jingcang Liu,Cong Li	1058180

	AVIC AERODYNAMICS RESEARCH INSTITUTE	
9:00-9:15	Experimental Study about the Morphing Airfoil Passively Deformable by Dynamic Pressure Kotaro Taguchi,Koh Fukunishi,Yasuto Sunada,Taro Imamura The University of Tokyo	1058341
9:15-9:30	Plasma Flow Control of Non-bistable Vortex Pair Over a Slender Conical Forebody Shiqing Yin[1],Jia Li[2],Huaxing LI[1],Xuanshi Meng[1] 1.Northwestern Polytechnical University 2.AECC Sichuan Gas Turbine Research Establishment	1059645
	Session2-6 Wind tunnel 2 Chair: Mr.Zhong Lei	
9:45-10:00	Investigation on dynamic derivative test technique in hypersonic wind tunnel Jin Liu,Yuhui Song,Jing Hu China Academy of Aerospace Aerodynamic（CAAA）	1013198
10:00-10:15	Design and Experimental Study of Spherical Calorimeter in Arc-Heated Wind Tunnel Jinlong Peng,Jianqiang Tu,Guosheng Lin,Dongbin Ou China Academy of Aerospace Aerodynamics	1029762
10:15-10:30	Calibration of the Versatile Platform and the Supersonic Integrated Section in CAAA JiaLin Jin,GuangLiang Li,ZhongWu Wei,JinGang Dong,Jiang Zhang China Academy of Aerospace Aerodynamics	1044102
10:30-10:45	Experimental Study of Turbulent Separated Flowfield Induced by a Perpendicular Blunt Fin Jikui Ma,Suxun Li,Yaofeng Liu China Academy of Aerospace Aerodynamics	1056944
	Session2-7 Wind tunnel 3 Chair: Mr. Taro Imamura	
11:00-11:15	Visualization of Separated Flow Features Induced by Cylindrical Protuberance at Hypersonic Speed by Double-Color Oil Flow Ning Cao,Zhaoyong Ni,Jikui Ma China Academy of Aerospace Aerodynamics	1056993
11:15-11:30	Study on the Characteristics of Interaction Flowfield Induced by Supersonic Tri-jets on a revolution body Shijie Luo,Jinglong Bo,Zhaoyong Ni,Yaofeng Liu China Academy of Aerospace Aerodynamics	1057004
11:30-11:45	Aerodynamic Characteristics and Plasma Flow Control of Static Hysteresis over an Airfoil at Low Reynolds Numbers Haoyu Chen[1],Xuanshi Meng[1],Long Zhou[2] 1.Northwestern Polytechnical University, 710072, Xi'an, China 2.Nanjing University of Aeronautics and Astronautics, 210016, Nanjing, China	1061974
11:45-12:00	High Angle of Attack Performance by Biomimicry of Humpback Whale Flipper Tubercles Cees Bil,Jack O'Brien RMIT University	1058276
	Oct. 17 P.M.	
	Session2-8 Wind tunnel 4 Chair: Mr. Taro Imamura	
13:30-13:45	Aerodynamic and Thermal Effects of Plasma Actuators on Anti-icing over an Airfoil Chang Li[1],Haiyang Hu[2],Xuanshi Meng[1],Jinsheng Cai[1],Hui Hu[2] 1.Department of Fluid Mechanics 2.Department of Aerospace Engineering	1061995
13:45-14:00	Experimental and Numerical Studies based on POD on Separated Flow Formed on NACA0012 Airfoil at Low-Reynolds-Number Jun Hattori[1],Yasuto Sunada[1],Taro Imamura[1], Yasir Ahmed Malik[2], Kenichi Rinoie[1] 1.The University of Tokyo, 2.The University of Twente	1054512
14:00-14:15	Flutter Modeling, Analysis and Test for Blended-Wing-Body Flying Wing Jihai Liu,Yingsong Gu,Ke Xie,Pengtao Shi Northwestern Polytechnical University	1060812
14:15-14:30	Data Reduction of the Multistage Compressor Using S2 Stream Surface Solver Chenghua Zhou[1],Xingmin Gui[1,2],Donghai Jin[1,2] 1.BeiHang University 2.Collaborative Innovation Center for Advanced Aero-Engine	1015537
	Session2-9 Unsteady Aerodynamics 1 Chair: Dr. Peng Lv	
14:45-15:00	Large Eddy Simulation of Laminar separation flow past the SD7003 Airfoil Zhibin Zhu,Peng Bai,Qing Shang China Academy of Aerospace Aerodynamics	1017018
15:00-15:15	Detached Eddy Simulation on the Flow around NACA0021 Airfoil beyond Stall using OpenFOAM Yue Wang,Kang Liu,Wenping Song,Zhonghua Han Northwestern Polytechnical University	1032010
15:15-15:30	Taylor-Culick Flow in Channel with Injection Regressing Wall Juan Duan,Yongliang Xiong,Ningdong Hu Huazhong University of Science and Technology	1010897
15:30-15:45	ILES, DDES and URANS Simulations of the Separated Flow around a Circular Cylinder: a Comparative Study He-Yong Xu[1,2],Qing-Li Dong[1,2],Chen-Liang Qiao[1,2],Zheng-Yin Ye[1,2] 1.Northwestern Polytechnical University 2.Research & Development Institute of Northwestern Polytechnical University in Shenzhen	1021658
	Session2-10 Unsteady Aerodynamics 2 Chair: Dr. Peng Lv	
16:00-16:15	Numerical simulation for DLR-F11 based on PMB3D solver with structural overlapped grid Jing Yu,Yonggang Yu,Zhu Zhou,Jiangtao Huang,Gang Liu,Xiong Jiang China Aerodynamics Research and Development Center	1009207
16:15-16:30	Numerical Analysis of Transonic Buffet Control using a Two- Dimensional Bump for a Supercritical Zheng Yang,Hideaki Ogawa RMIT University	1061604
16:30-16:45	The Effects of Mach Number on External Store Dropping Tests Using Froude's Similarity Han Qin,Fangjian Wang,Zhenfang Xia,Lan Chen China Academy of Aerospace Aerodynamics	1030072
16:45-17:00	Parallel Dynamic Mode Decomposition for Rayleigh–Taylor Instability Flows Weiwei TAN[1,2],Junqiang BAI[1],Zengdong TIAN[2],Li LI[2] 1.School of Aeronautics， Northwestern Polytechnical University 2.Aeronautical Computing Technique Research Institute	1034092

	Session2-11 Unsteady Aerodynamics 3 Chair: Prof.Cees Bil	
17:15-17:30	Research on the Aerodynamic Characteristics of Morphing Supercritical Airfoil Pengxuan Lei,Yuanjing Wang,Binbin Lv,Wenkui Shi China Aerodynamics Research and Development Center	1055770
17:30-17:45	Unsteady Flow Mechanism Investigation on Bio-inspired Motion of Nano Rotor Zhao Shanyong,Liu Zhen,Bu Chen,Che Penglei,Dang Tianjiao School of aerospace	1060179
17:45-18:00	Design and unsteady numerical simulation of variable geometry inlet using dynamic meshes Youcai Xia,Wanwu Xu,Wei Ye,Yicong Jia,Bangyun Wang College of Aerospace Sicence and Enginnering	1040576
18:00-18:15	Theoretical Analysis of Second Mode in Hypersonic Boundary Layer above Porous Wall Peng Lv[1],Yudong Zhang[1],Jian Gong[1],Tiziano Pagliaroli[2] 1.China Academy of Aerospace Aerodynamics 2.Northwestern Polytechnical University	1027901
18:15-18:30	Numerical study on aerodynamics of contra-rotating open rotor Zhenfeng Xia[1],Yong Yang[2],Yudong Zhang[1] 1.China Academy of Aerospace Aerodynamics 2.Northwestern Polytechnical University	1029924

Track 3 ShuYun Room (3rd Floor)

Oct. 16 P.M.

	Session3-1 Structure analysis 1 Chair: Mr. Atsuhiko Senba	
13:30-13:45	Analysis on Modeling of Constant Pressure Difference Valve of Certain Turboshaft Engine Yanyan Wei,Chunlei Chang,Hongyu Wang,Di Kang Army Aviation Institute	909157
13:45-14:00	A Fast Geometric Modeling Method for Cold Blades Kaicheng Liu[1],Bowen Ni[2] 1.Beihang University 2.China Mobile Group Xinjiang Company Limited	1062155
14:00-14:15	Shock wave propagation analysis on honeycomb sandwich structure with insert system Hyun-Su Park,Dae-Hyun Hwang,Jae-Hung Han KAIST	1064778
14:15-14:30	A Cold-Hot State Conversion Method for Compressor Structure Shiyu Wu AECC	1061834
	Session3-2 Structure analysis 2 Chair: Mr. Atsuhiko Senba	
14:45-15:00	Fatigue Life Prediction Method for the Civil Airplane Actuator Structure Based On the First Principal Stress Correction Peng Liu,Linyuan Dong,Wei Zhang,Tao Hua,Zidong Yin,Yixue Hu AVIC Xi'an Flight Automatic Control Research Institute	1051139
15:00-15:15	Research on the Critical Loads Selecting Methods for the Civil Aircraft Yi Liu,Zhongwu Yan Shanghai Aircraft Design and Research Institute，COMAC	1057465
15:15-15:30	Crack and shear band interaction in bulk metallic glasses Bingjin Li[1,2,3],Ding Zhou[1,2,3],Bing Hou[1,2,3],Shuangyin Zhang[1,2,3],Yulong Li[1,2,3] 1.School of Aeronautics，Northwestern Polytechnical University 2.Joint International Research Laboratory of Impact Dynamics and Engineering Application 3.Shaanxi Key Laboratory of Impact Dynamics and Engineering Application	1052239
15:30-15:45	Structure Modelling and Simulation Analysis of Six-rotor UAV Zhanke Li,Jiao Guo,Faming Li,Yudong Yan,Ying Yang,Yang Liu NWPU	1038053
	Session3-3 Structure analysis 3 Chair: Mr. Hitoshi Arizono	
16:00-16:15	Research on Motion Relationships and Transmission Efficiency of Planetary Roller Screw Wensen Zhang,Shicheng Zheng,Peng Zhang,Yongling Fu,Xiaoye Qi Department of Mechanical Engineering and Automation，Beihang University	1055123
16:15-16:30	Controlling on the Consistency of Accumulated Assembly Errors under Digital Manufacturing Environment for Aircraft Feiyan Guo[1],Fang Zou[1],Jianhua Liu[2],Zhongqi Wang[3],Qingdong Xiao[1] 1.AVIC Manufacturing Technology Institute 2.Beijing Institute of Technology 3.Northwestern Polytechnical University	1010720
16:30-16:45	Effect of Clearance on Bolt Loosening Behaviors of Segmented Nuts in Pyroshock-Reduced Separation Nut Jae Young Choi,Jeongmin Woo,Dahoon Kang,Jeong Ho Kim,Jin Yeon Cho Inha University	1060961
16:45-17:00	Topology Optimization Design of Typical Hinge for Civil Aircraft Yu Wang,Wei Liu,Jiazhen Zhang Beijing Aeronautical Science & Technology Research Institute of COMAC	1061938 NO SHOW
17:00-17:15	Three-dimensional Cellular Automata Model of Uniform Corrosion for Aluminium Alloy Hua Ji,Keliang Ren,Ting Wang,Xiaobin Zhang,Jimin Li,Zixiang Zhang,Dongxu Guo NingXia University	1029354 NO SHOW
	Session3-4 Structure analysis 4 Chair: Mr. Hitoshi Arizono	
17:15-17:30	Simulation and test study of the three-direction stiffness and grounding characteristics of the metal spring Zhenglong Zhao,Bin Song,Jiangang Lv,Jinhua Liu,Zhongzhi Zhang Shi jiazhuang Campus. AEU	1025625
17:30-17:45	Weight Design Platform of Hybrid Wing Body Based on Vehicle Sketch Pad Lu BAI,Ming XIA,Weifeng SHI,Shuai ZHANG Beijing Aeronautical Science & Technology Research Institute of COMAC	1061649
17:45-18:00	Numerical Analyses on Effect of Additional Masses on Deformation of Back Structure for Space Reflecto Atsuhiko Senba Meijo University	1060907
18:00-18:15	Empirical Structural Analysis on Chinese Airline Network Yong Yang,Kaijun Xu,Shanshan Li Civil Aviation Flight University of China	1019525

18:15-18:30	Improved Geometrical Exact Beam Formulation for Moving Composite Structures Haeseong Cho,Byeonguk Im,SangJoon Shin Seoul National University	1048805
18:30-18:45	Fast Parallel Computation for Structural Analysis based on FETI-type Approaches HyunShik Joo,SangJoon Shin,Haeseong Cho,Taeyoung Chun Seoul National University	1051639

Oct. 17 A.M.

Session3-5 Structural Testing   Chair: Prof. SangJoon Shin

8:30-8:45	Research on State Monitoring of CNC Machine Tool based on Dual Dimension Feature Xuezhen Chen, Chunlei LI,Lianyu LI ,Yuanmeng XIA AVIC Chengdu Aircraft Industrial(Group) Company	1021371
8:45-9:00	Measuring the Aero-Refueling Hose Model's Sectional-Bending-Stiffness in the RMCFLM Experimental System Hao Wen[1],Aiming Shi[1],Earl Dowell[2],Xiang Li[1] 1.NPU-Duke Topic Group for Aerodynamics and Aeroelasticity (TGAA)，Northwestern Polytechnical University 2.NPU-Duke Topic Group for Aerodynamics and Aeroelasticity (TGAA)，Duke University	1031717
9:00-9:15	Experimental study on the shock propagation and attenuation of the structural joints Dae-Hyun Hwang,Hyun-Su Park,Jae-Hung Han KAIST	1064874
9:15-9:30	The Use of Strain Measurement Techniques at Elevated Temperatures Jianguang Bao[1,2],Adil Benaarbia[1],Siyuan Bao[3],Qingrui Hao[2],Yonghong Wang[3],Wei Sun[1] 1.Department of Mechanical，Material and Manufacturing Engineering，University of Nottingham，Nottingham，Nottingham Shire，United Kingdom，NG7 2RD 2.Aircraft Strength Research Institute，Aviation Industry Corporation of China (AVIC)，Xi'an City，Shaanxi Province，China，710065 3.The School of Instrument Science and Opto-Electronics Engineering，Hefei University of Technology，Hefei City，Anhui Province，China，230009	1030285

Session3-6 Composite Structures 1   Chair: Dr. Fan Xie

9:45-10:00	A New Hierarchical Optimization Method for Carbon Fiber Reinforced Laminates Based on Genetic Algorithm Junhui Meng,Moning Li,Li Liu Beijing Institute of Technology	1016990
10:00-10:15	Flexural Torsional Buckling of Triaxially Braided Circular Arches Under Three-Point Bending Kyeongsik Woo,Nega Biruk F.,Mekonnen Abebaw A. Chungbuk National University	1031128
10:15-10:30	The Effect of Defect in Triaxial Braided Textile Composite Effective Material Properties Kyeongsik Woo,Abebaw A. Mekonnen Chungbuk National University	1031187
10:30-10:45	A Prediction on Mechanical Properties of 3D Woven Composites Kim,Hiyeop|Song,Younggyu|Gong,Incheol|Sung,Yoonju|Park,Jungsun|Lee,Jungjin Korea aerospace university|Korea aerospace research institute	1047423

Session3-7 Composite Structures 2   Chair: Dr. Fan Xie

11:00-11:15	Numerical Analysis of Vibration Behaviors of Polymer-Metal Interpenetrating Phase Composites Fan Xie[1],Weilin Zheng[2],Ping Xu[1],Weining Zhang[1] 1.AVIC Shenyang Aircraft Design & Research Institute 2.College of Aerospace Engineering，Shenyang Aerospace University	944571
11:15-11:30	An Investigation on the Pin-bearing Behavior of Glass-reinforced Aluminum Laminate Yue Zhuo[1],Riming Tan[2],Zhidong Guan[2],Hu Dan[1] 1.AVIC Chengdu Aircraft Design & Research Institute 2.School of Aeronautic Science and Engineering，Beihang University	1019475
11:30-11:45	Title Simulation and Experimental Verification For Composite Material Structure of Helicopter Tail Fin Kunfa Men,Heng Sun,Xin Chen Aircraft Design and Research Institute	1053693
11:45-12:00	A Progressive Failure Analysis of a Composite Double Bolted Joint using Finite Element Method Kim,Pyunghwa|Kim,Sungmin|Kim,Sanhui|Park,Jungsun|Yoon,Donghyun Korea aerospace university|Chungnam national university	1047392

Oct. 17 P.M.

Session3-8 Aeroelasticity 1   Chair: Mr.Jinlong Peng

13:30-13:45	Body Freedom Flutter Investigation Using Different Commercial Softwares Ke Xie,Yingsong Gu,Jihai Liu,Pengtao Shi Northwestern Polytechnical University	1060730
13:45-14:00	Static Aeroelastic Optimization Design and Verification of Composite Wing with Large Sweep Angle Xu Yuntao,He Haibo Beijing Institute of Mechanical and electrical engineering	1047139
14:00-14:15	Efficient transonic static aeroelastic optimization based on structure modes Fei He[1,2],Chao Yang[1],Qiufeng Zheng[2],Hai Liu[2] 1.Beihang University 2.Chengdu Aircraft Design&Research Institute	962560
14:15-14:30	A Highly Efficient Grid Deformation Strategy Based on Proper Orthogonal Decomposition Hao Chen,Min Xu,Dan Xie,Yabin Wang,Xiaomin An Northwestern Polytechnical University	1047762

Session3-9 Aeroelasticity 2   Chair: Mr.Jinlong Peng

14:45-15:00	Nonlinear flutter test of a very flexible wing Zhichao Fu,Ziqiang Liu China Academy of Aerospace Aerodynamics	1026147
15:00-15:15	Geometrical nonlinear aeroelastic wind tunnel model design and experiment Jinan Lv[1],Xinjiang Wang[1],Zhichao Fu[1],Yuntao Xu[2],Yi Liu[2] 1.China Academy of Aerospace Aerodynamics 2.Beijing Institute of mechanical and electrical engineering	1050130
	Fast Flutter Uncertainty Calculation Based on Arbitrary Modal Shapes and Reduced - Order Modeling	

15:15-15:30	GuangJing Huang,YuTing Dai,Chao Yang,SiYan Zhu Beihang university	1006899
15:30-15:45	Static Aeroelastic Analysis for A Large Aircraft Based on A Coupled CFD-CSD Method Lisha Wang,Xu Cao,Yonghui Liu,Xiaofeng Shi AVIC Xi'an Aircraft Design and Research Institute	1035624

Session3-10 Structural Dynamics 1   Chair: Prof. SangJoon Shin

16:00-16:15	Helicopter Lead-Lag Damper Modeling Using Fractional Derivative Methods Ruirui Li,Jinyu Wang,Zheng Xu Shanghai Civil Aviation College	1034216
16:15-16:30	Time varying mesh stiffness calculation of spur gear pair under mixed elastohydrodynamic lubrication condition Pengfei Ji,Zhiying Chen Beihang University	1052450
16:30-16:45	Phase Tangent Slope Method for Modal Damping Identification of a Simulation Power Turbine Rotor Jie Bian,Yanong Chen,Shizhi Wu,Youliang Xu,Qing Mei,Wangqun Deng AECC Hunan Aviation Powerplant Research Institute	1054817
16:45-17:00	Transient dynamic response of the aero-engine dual-rotor system under the blades loss load Chi Ma,Lulu Liu,Gang Luo,Wei Chen,Zhenhua Zhao Aero-engine Thermal Environment and Structure Key Laboratory of Ministry of Industry and Information Technology，Nanjing University of Aeronautics and Astronautics，Nanjing 210016，China	1088346

Session3-11 Structural Dynamics 2   Chair: Prof. SangHo Kim

17:15-17:30	Theoretical comparison and discussion about nonlinear reduced order model Di Wang,Xiong-Wei Yang,Yue-ming Li Xi'an Jiaotong University	1061295
17:30-17:45	Planning of Flight Load Validation Test for Civil Transport Aircraft Zhi Zhang,Yang Liu Shanghai Aircraft Design and Research Institute，COMAC	1061032
17:45-18:00	Study on RCS Characteristics of Low Scattering Carriers of Spherical Convergent Nozzle Yichao Liang[1],Qingzhen Yang[2],Yongqiang Shi[2],Jin Bai[2],Qi Lin[1] 1.Xiamen University 2.Northwestern Polytechnical University	1028297
18:00-18:15	Automatic modal parameters identification of control surface under colored noise excitation Tianci Gao,Xudong He,Huaihai Chen State Key Laboratory of Mechanics and Control of Mechanical Structures	1057622
18:15-18:30	Thermal modal analysis and vibration characteristics test of turbine rotor blades Gao,Xiang|Yan,Qun|Yang,Zhi-bin|Huo,Shi-yu Aircraft Strength Research Institute	1035698

Track 4   Shu Shui Room(3rd Floor)

Oct. 16 P.M.

Session4-1 Propulsion   Chair: Prof. Song Fu

13:30-13:45	Computational Study on Two Dimensional Electrothermal Deicing Problem Chunhua Xiao, Kunlong Yu, Yubiao Jiang, Ming Li, Zhangsong Ni State Key Laboratory of Aerodynamics, China Aerodynamics Research and Development Center, Mianyang 621000, China	1025876
13:45-14:00	Quantitative Relationship between Fluorescence Intensity and Equivalence Ratio of Kerosene Yongsheng Zhao[1],Junfei Wu[1],Xiaohu Tian[1],Yuzhen Lin[2],Wei Wei[1] 1.China Aerospace Science and Technology Corporation 2.Beihang University	1029091
14:00-14:15	An Experimental Study on Reducing Depositing on Turbine Vanes with Transverse Trenches Zhengang Liu,Fei Zhang,Zhenxia Liu Northwestern Polytechnical University	1048395
14:15-14:30	Investigation on the Rotor/Stator interference of multi-stage compressor Ziwei,Wang China Aerodynamics Research and Development Center	1062105

Session4-2 Combustion analysis 1: Numerical   Chair: Prof. Jianping Wang

14:45-15:00	The Investigation of Fuel Effects on Industrial Gas Turbine Combustor using OpenFOAM Yinli Xiao,Zhibo Cao,Changwu Wang,Wenyan Song Northwestern Polytechnical University	900851
15:00-15:15	Numerical study on combustion and heat transfer of a GOX/GCH4 pintle injector Yibing Chang,Jianjun Zou,Qinglian Li,Peng Cheng,Kang Zhou National University of Defense Tecnology	1022573
15:15-15:30	Analysis of Overall Performance of Multi-stage Combustor Scramjet Engine Jinfeng Du[1],Haomin Li[1,2] 1.15510862381 2.17795832945	1035548
15:30-15:45	High-fidelity Hybrid RANS/LES of a Kerosene-fueled HIFiRE-2 Dual-mode Ramjet Flowpath using Flamelet/Progress Variable Approach Junsu Shin,Hong-Gye Sung Korea Aerospace University	1062101

Session4-3 Combustion analysis 2: Experimental   Chair: Prof. Jianping Wang

16:00-16:15	Experimental Research on Air/Ethanol Mono-injector Gas Generator FANG ZHAO,Ze-bin REN,Xian-feng LI,Yu TAO,Yu SHI China Aerodynamics Research & Development Center	1033143
16:15-16:30	Study on heat flux identification and measurement method for the stagnation point of sharp leading edge Jinlong Peng,Rushen Yang,Guosheng Lin,Dongbin Ou China Academy of Aerospace Aerodynamics	1029785
16:30-16:45	Experimental Study of High-Efficiency Loop Heat Pipe for High Power Avionics Cooling Zhihu Xue China Academy of Aerospace Aerodynamics (CAAA)	1055065

Session4-4 Combustion analysis 3: Numerical   Chair: Prof. Jianping Wang

17:15-17:30	Development of Cell-Centered and Unstructured/Hybrid mesh based Compressible Navier-Stokes Solver Jong-Chan Kim,Hong-Gye Sung Korea Aerospace University	1061888
17:30-17:45	Application of the Projective Method in the Numerical Simulation of Combustion Yang Liu[1],Zheng Chen[2] 1.Shanghai Aircraft Design and Research Institute 2.College of Engineering，Peking University	1061458

<div align="center">Session4-5 Guidance 2   Chair: Prof.Seiya Ueno</div>

17:45-18:00	Velocity Estimation of Terrain Referenced Navigation Based on Two Stage Point Mass Filter Yong-gonjong Park[1,2],Chan Gook Park[1,2] 1.Seoul National University 2.Automation and Systems Research Institute	1061679
18:00-18:15	Comparison of Adaptive ARS Methods in the Presence of External Acceleration Jungmin Park[1,2],So Young Park[1,2],Chan Gook Park[1,2] 1.Seoul National University 2.Automation and Systems Research Institute	1061681
18:15-18:30	Automatic Target Recognition Using You-Only-Look-Once Algorithm with Mid-Wave Infrared Images Jaeyoung Chung[1,2],Chan Gook Park[1,2] 1.Seoul National University 2.Automation and Systems Research Institute	1061742
18:45-19:00	Dynamic calibration technique of Beidou navigation system based on rocket sled Ranzhong Yao AVIC Aerospace Life-Support Industries，LTD.	1002337 NO SHOW

<div align="center">Oct. 17 A.M.</div>

<div align="center">Session4-6 Detonation & Rocket   Chair: Dr.Zhiyong Liu</div>

8:30-8:45	Numerical Study of the Counter-rotating Waves in the Hollow Rotating Detonation Engines Xiang-Yang Liu,Yan-Liang Chen,Song-Bai Yao,Jian-Ping Wang Center for Combustion and Propulsion，Department of Mechanics and Engineering Science	1032592
8:45-9:00	One Dimensional Analysis of the Performance of a Continuous Rotating Detonation Engine Siyuan Huang[1],Yu Tan[1],Xiangdong Li[1],Hu Ren[1],Hongbin Li[1],Zheng Luo[1] 1.Science and Technology on Scramjet Laboratory 2.Science and Technology on Scramjet Laboratory，China Aerodynamics Research and Development Center Hypersonic Institute	1009664
9:00-9:15	Analysis of Combustion Instability via Constant Volume Combustion in a Small MMH-NTO Liquid Rocket Jianxiu Qin[1],Huiqiang Zhang[2] 1.China Academy of Aerospace Aerodynamics 2.School of Aerospace engineering，Tsinghua University	1016550

<div align="center">Session4-7 Cooling system   Chair: Dr.Zhiyong Liu</div>

9:15-9:30	Numerical Investigation on Intersecting-grids Composite Cooling Structure with Internal Network Channels Guanghua Zheng,Yong Chen,Jialin Li Northwestern Polytechnical University	1054440
9:30-9:45	Transient Simulation for the Gas Ingestion through Turbine's Rim Seal Jianping Hu,Zhenxia Liu,Pengfei Zhu,Yaguo Lu Northwwestern Polytechnical University	1049018

<div align="center">Session4-8 Aero-Engines 1   Chair: Dr. Yinli Xiao</div>

9:45-10:00	Effect and significance of convective Mach number on the stability of compressible mixing layers Zhiyong Liu,Min Yu,Xiangjiang Yuan China Academy of Aerospace Aerodynamics	1061296
10:00-10:15	Numerical Study on the Influence of the Trailing Edge Overflow Holes on the Flow and Heat Transfer of the Inner Cooling Passage on the Trailing Edge of the Turbine Blade Shun Zhao,GuangHua Zheng,ChengCheng Hui Northwestern Polytechnical University	1053158
10:15-10:30	Extended Kalman Filter infusion algorithm design and application characteristics analysis to stochastic closed loop fan speed control of the nonlinear turbo-fan engine Yuansuo Zhang,Xiaowu Lv AECC Commercial Aircraft Engine Co.，Ltd	1061372
10:30-10:45	A Frequency Domain Identification with Maximum Likelihood Method for Aircraft Engine Nan Liu Shanghai Aircraft Design and Research Institute，Commercial Aircraft Corporation of China Ltd	1060746

<div align="center">Session4-9 Aero-Engines 2   Chair: Dr. Yinli Xiao</div>

10:45-11:00	The transient performance of FLADE variable cycle engine during mode transition Hong Zhou[1],Xiang Gao[1],Zhanxue Wang[2],Wei Zhang[1] 1.AVIC the first aircraft design and research institute 2.Northwestern Polytechnical University	1035355
11:00-11:15	Numerical Simulation of Bird Strike on a S-shaped Stealth Inlet Kunyang Li,Xianghua Jiang,Dasheng Wei School of Energy and Power Engineering，BUAA，Beijing，China	1048344
11:15-11:30	A Reduction LPV Model Based on the Gas Dynamic Similarity for Turbofan Engine Dynamic Behavior Zhanyue Zhao,Yingqing Guo Northwestern Polytechnical University	1054792
11:30-11:45	MBSE Approach to Aero-engine Turbine System Design and Requirements Management YUFENG WANG[1],ZHIYING CHEN[1],YUCHEN ZHANG[2],TENG LI[2] 1.Beihang University 2.AVIC Digital. Inc	1053395
11:45-12:00	Design and Simulation of Turbofan Engine Digital Electronic Nozzle Control System Huafeng Yu,Yingqing Guo,Jiawei Guo Northwestern Polytechnical University	1054486

<div align="center">Oct. 17 P.M.</div>

<div align="center">Session4-10 Aero-Engines 3   Chair: Prof. Jianping Wang</div>

13:30-13:45	Measuring Method of Micro Cone Hole in the Nozzle Based on Depth From Focus Chenxing Bao,JingLiang Liu,Xue Hao,DongWei Wang	1050615

	Beijing Precision Engineering Institute for Aircraft Industry	
13:45-14:00	Laminar transition over airfoil: numerical simulation of turbulence models and experiment validation Shuyue Wang[1],Gang Sun[1],Meng Wang[2],Xinyu Wang[1] 1.Fudan University 2.AVIC Aerodynamic Research Institute	984817
14:00-14:15	Application of ray tracing method in analyzing the electromagnetic scattering of different nozzles Xiang Gao,Hong Zhou,Wenjian Deng,Qingzhen Yang AVIC the first aircraft design and research institude	1030224
14:15-14:30	Study on Thermal load and Dredging Thermal Protection of Supersonic Combustor Xiaojun Zhu,Feng Li,Fei Xue,Dongbin Ou,Lianzhong Chen,Kai Zhou China Academy of Aerospace Aerodynamics, Beijing 100074，China	
	Session4-11 Space Propulsion Chair: Prof. Song Fu	
14:45-15:00	Performance Evaluation of Magnetic Nozzle by Using Thermal Plasma Tatsumasa Hagiwara[1],Yoshihiro Kajimura[2],Yuya Oshio[3],Ikkoh Funaki[4],Hiroshi Yamakawa[4] 1.Kyoto University 2.National Institute of Technology， Akashi College 3.Tokyo University of Agriculture and Technology 4.Japan Aerospace Exploration Agency	1028735
15:00-15:15	Investigation of Influence of Magnet Thickness on Performance of Cusped Field Thruster via Multi-Objective Design Optimization Suk Hyun Yeo,Hideaki Ogawa School of Engineering	1015438
15:15-15:30	The Effects of Swirl on Low Power Arcjet Thruster Flowfield and Heat Transfer Characteristics Xinai Zhang[1],Haibin Tang[2] 1.Shanghai Aircraft Design and Research Institute 2.Beijing University of Aeronautics and Astronautics	995052
15:30-15:45	Numerical Plume Analysis of Ammonium Dinitramide Green Propellant Jung Won Kuk,Kyun Ho Lee Sejong University	1060795
	Session4-12 Space Technologies Chair: Dr. Jun-Min Choi	
16:00-16:15	Real-Time Estimation of Satellite's Time-Varying Inertia Properties using UKF Sangchul Lee,Jisung Lim,Sungwook Yang Korea Aerospace University	1056731
16:15-16:30	Point-cloud-based relative attitude estimation for the malfunctioned satellites Wang Yongsheng Wang[1,2],Yu Feng Yu[1,2],Xu Na Xu[1,2] 1.Nanjing University of Aeronautics and Astronautics 2.Aerospace Institute	1060860
16:30-16:45	Attitude Control Simulator for the Korea Pathfinder Lunar Orbiter Dawoon Jung,Jae Wook Kwon,Kwangyul Baek,Han Woong Ahn Korea Aerospace Research Institute	1052135
	Session4-13 Turbomachines Chair: Prof. Song Fu	
17:15-17:30	Comparison of Electric Ducted Fans for Future Green Aircrafts Roman Pankov,Jiyong Tang Nanjing University of Aeronautics and Astronautics	1001590
17:30-17:45	Test Research on Operational Deflection Shape and Operational Modal Analysis of Aeroengine Blade Chao Hang,Qun Yan,Jian Xu,Xiang Gao Aircraft Strength Research Institute	1027126

Track 5   Shu Shan Room (3rd Floor)

Oct. 16 P.M.

	Session5-1 Hypersonic applications Chair: Dr. Zhiyong Liu	
13:30-13:45	Symplectic Runge-Kutta Method Based Numerical Solution for the Hamiltonian Model of Spacecraft Relative Motion Runde Zhang,Leping Yang,Weiwei Cai National University of Defense Technology	1060217
13:45-14:00	Cache Effects in Processor's Performance Bum-Soo Yoo,Jae-Yeop Jeong,Sun-Wook Kim,Jong-Wook Choi Korea Aerospace Research Institute	1021101
14:00-14:15	Lagrangian Method on an Arresting Gear for UAV Yasuo Obikane Hue Industrial College	1027351
14:15-14:30	Global instability of hypersonic attachment line flow Youcheng Xi,Song Fu Tsinghua University	1034581
	Session5-2 Simulation for other applications Chair: Dr. Felix Finger	
14:45-15:00	Simulation Platform for New Flight Technology of Civil Aviation Lisha Ye,Li Cao Nanjing University of Aeronautics and Astronautics	951085
15:00-15:15	Helicopter Flight Dynamics Simulation with Continues-Time Unsteady Vortex Lattice-Free Wake and Multibody Dynamics Shuai Deng,Chen Jiang,Yunjie Wang,Haowen Wang Tsinghua University	1045034
15:15-15:30	Flight Test Maneuver Classification using Pattern Recognition for Aerodynamic Parameter Estimation of Light Aircraft LV Thang Nguyen[1],Maxim Tyan[1],Seung-Hyeog Nah[2],Jae-Woo Lee[1] 1.Konkuk University 2.Korea Institute of Science and Technology	1061512
15:30-15:45	Flight risk quantitative assessment based on extreme values of flight parameters Zhe Li,Haojun Xu,Yuan Xue,Yang Wei,Xiaocong Duan Air Force Engineering University	1062159
	Session5-3 Human environment Chair: Prof.Yongling Fu	
16:00-16:15	Effects of Flight Environment on Pilot Workload in Simulated and Actual Flight Xueli He,Ling Ding,Chongchong Miao,Canhui Wu AVIC China Aero-polytechnology Establishent	1025964
	Integrated Cockpit Simulation Design for Civil Aircraft Alerting System	1061861

16:15-16:30	Zheng LIU[1,2],Jing Jin Zhang[1],Fei Li[1],Da Yong Dong[1],Hong Tao Liu[1],Yi Hu[1] 1.Shanghai Aircraft Design and Research Institute 2.East China University of Science and Technology	1061801 NO SHOW

Session5-4 Dynamics   Chair: Prof.Yongling Fu

16:45-17:00	Dynamic Modeling of a Tilt Rotor UAV Haijun Pu,Chunyang Wang,Zhou Zhou Northwestern Polytechnical University	1060859

Session5-5 Civil aviation safey   Chair: Prof. Cees Bil

17:15-17:30	The Method and Practices of Aircraft-Level Functional Integration Test in the Lab for Large Jetliner Junwei Fang Shanghai Aircraft Design and Research Institute	1061388
17:30-17:45	Interactive Simulation Design for Civil Aircraft Cockpit Assessment and Optimization Jing Jin Zhang,Zheng Liu,Fei Li,Da Yong Dong,Hong Tao Liu,Yi Hu Shanghai Aircraft Design and Research Institute	1062052 NO SHOW
17:45-18:00	Employing Model-Based Systems Engineering (MBSE) on a SADRI Civil Aircraft Research Project: A Case Study Zheng LIU[1,2],Jing Jin Zhang[1],Fei Li[1],Da Yong Dong[1],Hua Meng[1],Hong Tao Liu[1],Xing Chai[1] 1.Shanghai Aircraft Design and Research Institute 2.East China University of Science and Technology	1072716 NO SHOW
18:00-18:15	A Functional Requirements Development and Management Approach Applied in the Civil Aircraft Development Haomin Li[1,2],Xinai Zhang[1],Chao Tang[1],Chao Zhan[1] 1.Shanghai Aircraft Design and Research Institute 2.Shanghai Jiaotong University	1015743

Oct. 17 A.M.

Session5-6 Sensors and Sensing   Chair: Prof. Yongling Fu

8:30-8:45	Research on Integrated Displacement Sensing Technology of Aviation Metering Device Shangwei Xun,Bin Zhang,Xingliang Li,Meng Guo AVIC Beijing Precision Engineering Institute for Aircraft Industry	1054982
8:45-9:00	Problem of Continuous-Discrete Time mixed Hybrid Model for Incremental Nonlinear Dynamic Inversion Hyung-suk Oh,Sangho Ko Korea Aerospace University	1060979
9:00-9:15	Study on Measuring Flange Hole of Aviation Conduit Ruilin Feng[1],Changtao Pang[1],Jingliang Liu[1],Zhenyu Yu[2] 1.Beijing Precision Engineering Institute for Aircraft Industry 2.Chengdu Aircraft Industrial (Group)	1055721

Session5-7 Motors and Pumps   Chair: Prof. Yongling Fu

9:30-9:45	Experimental study of report of Pumping Motion Airborne Wind Power Generating system Hiroki Endo Kyushu University	1060540
9:45-10:00	Design and Performance Analysis of a Local Electro-Hydraulic Generation System MingKang WANG,YongLing Fu,ZiWang Lin,ZhenYu Gou,Jian Fu BeiHang university	1059652
10:00-10:15	Design of small BLDCM for aircraft fuel pump Yaru Liu,Yu Zhou,Jin Cao Nanjing engineering institute of aircraft system	938790
10:15-10:30	Characteristic analysis and Simulation of aero-engine DC starting motor Sanmai Su[1],Bowen Yao[2], Yongqin Chen[2],Jun Ma[1] 1.Northwestern Polytechnical University 2.Xidian University	1062109
10:30-10:45	Control Dynamic Performance Analysis of a Novel Integrated Electro Mechanical Hydrostatic Actuator Xudong Yan,Liming Yu,Junlin Pan,Jian Fu,Yongling Fu Beihang University	1059781

Session5-8 Flight Control Actuation System and Actuators   Chair: Dr. Jian Fu

11:00-11:15	Design and Application of Flight Control Actuation System Models Based on Modelica Shuang Wu[1],Bingrui Bao[2] 1.Shanghai aircraft design and research Institute 2.SuzhouTongyuan Software&Control Tech. Co.	1056216
11:15-11:30	Design and Simulation Analysis of Electric Drive Emergency Release System for Landing Gear Lock Mechanism Jun Zhang,Xiaohui Wei,Yin YIn Nanjing University of Aeronautics and Astronautics.Nanjing	1058877
11:30-11:45	Sensor Fault Detection and Isolation of Electromechanical Actuator Based on Structural Residual Parity Space Shimeng Cui[1],Laixue Sun[2] 1.Beijing Aeronuatical Science & Technical Institute of COMAC 2.School of Automation Science and Electrical Engineering. Beihang University	1060793

Oct. 17 P.M.

Session5-9 Sensors & System Modeling   Chair: Dr. Jian Fu

13:30-13:45	Distance estimation for wall collision avoidance without distance sensor Kazuhiro Fukuda[1],Hiroshi Tokutake[1],Shigeru Sunada[2],Yasutada Tanabe[3],Koichi Yonezawa[4] 1.Kanazawa Univesity 2.Nagoya University 3.Japan Aerospace Exploration Agency 4.Central Research Institute of Electric Power Industry	1054150
13:45-14:00	EM-based online identification algorithm for linear aerodynamic model parameters Hang Zou,Wei Zhang,Junyi Zuo,Xiaodan Chen,Yawen Cao Northwestern Polytechnical University	1023789
14:00-14:15	Line of Sight Rate Estimation Performance Analysis of Reference Frame using Kalman Filter Dong-Yeon Lee,Gun-Hee Moon,Seong-Min Hong,Min-Jea Tahk Korea Advanced Institute of Science and Technology	1060997
14:15-14:30	Spanwise traveling wave of wall blowing and suction control in turbulent channel flow Yi Huang,Song Fu Tsinghua University	1082510

Session5-10 Drag reduction of aircraft   Chair: Dr. Wenqing Yang

14:45-15:00	Drag reduction on the fuselage shape Li Zhang,Zheng-Hong Gao	1034219

	Northwestern Polytechnical University	
15:00-15:15	The Investigation of the Maximum Possible Drag Reduction of the Winglet under the Limitation of Wing Root Yi Liu,Shaoxiu Ouyang,Xiaoxia Zhao AVIC Aircraft co.，LTD，Hanzhong Branch	1024481
15:15-15:30	The Research of the Drag Reduction Effect of a Variable Camber Wing of a Transport Aircraft Based on Trailing Edge Flap Deflection of Small Angles Yi Liu,Shaoxiu Ouyang,Xiaoxia Zhao AVIC Aircraft co.，LTD，Hanzhong Branch	1036188
15:30-15:45	The Research on the Drag Reduction of Transport Aircraft Using Ventral Fins Shaoxiu Ouyang,Yi Liu,Xiaoxia Zhao,Xiao Zhang AVIC Aircraft co.，LTD，Hanzhong Branch	1041600
15:45-16:00	A Study on Aerodynamic Drag Reduction for High Speed Helicopter Airframe NOBORU KOBIKI[1],Yasutada Tanabe[1],Masahiko Sugiura[1],Hideaki Sugawara[2] 1.JAXA 2.Ryoyu Stystems Co.，Ltd.	1090891
	Session5-11 Aircraft experiment Chair: Dr. Joon Chung	
16:00-16:15	Experimental investigation of impact of installation on jet noise from turbofan engine in model-scale Yingzhe Zhang,Incheol Lee,Dakai Lin,Zhigang Yang Beijing aeronautical science and technology research institute of commercial aircraft corporation of China，Ltd.	1037849
16:15-16:30	Experimental Study on Aerodynamic Performance of Flapping Wing with One-way Holes/Gaps Wenqing Yang[1],Bifeng Song[1],Guanglin Gao[2],Kun Zhang[3] 1.Northwestern Polytechnical University 2.Beijing Institute of Aerospace Technology 3.Beijing Institute of Mechanical and Electrical Engineering	1005319
16:30-16:45	Experimental Study on Aerodynamic Sound from Small Blade Yuta Kawashima,Ayumu Inasawa Tokyo Metropolitan University	1061472
16:45-17:00	Measurement of Propeller Characteristics at a Negative Advance Ratio Using a Whirling Arm Facility Yuto Itoh,Atsushi Satoh Iwate university	1061671
	Session5-12 Aircraft test 1 Chair: Dr. Jian Fu	
17:15-17:30	A New Concept of Compound Helicopter and Flight Tests Yasutada Tanabe[1],Masahiko Sugiura[1],Noboru Kobiki[1],Hideaki Sugawara[2] 1.Japan Aerospace Exploration Agency (JAXA) 2.Ryoyu Systems Co.，Ltd	1073238
17:30-17:45	An Aircraft Level System Test Facility Based on Individual System Test Benches Chen Wu,Guirong Zhou,Guanglei Xu,Bin Gao Shanghai Aircraft Design and Research Institute	1061945
17:45-18:00	Civil Aircraft Fly Test Frequency-Domain Data Method Research Bin Gao[1,2],Zhengqiang Li[2] 1.Nanjing University of Aeronautics and Astronautics 2.Shanghai Aircraft Design and Research Institute	1059403
18:00-18:15	Design and experimental study on a flapping wing micro air vehicle Yi Liu,Yanlai Zhang,Jianghao Wu Beihang university	1035481
18:15-18:30	Calculation and Analysis of Aircraft Pollution Emissions in the Take-off Phase ZHIqiang WEI[1],Xiaolan HAN[1], Joon Chung[2],Aaron Sotto[2] 1.CAUC 2.Aerospace Engineering at Ryerson University	938055

Track 6   Wu Hou Room(5th Floor)

Oct．16 P.M.

	Session6-1 UAV 1 Chair: Dr. Wenqing Yang	
13:30-13:45	Experimental Investigation on Ground Effect of Ducted Fan System for VTOL UAV Yangping Deng Northwestern Polytechnical University	1060831
13:45-14:00	Optimization for Conceptual Design of Reconfigurable UAV Family Haoyu Zhou,Ya Ding,Yalin Dai,Xiaoqiang Qian Nanjing University of Aeronautics and Astronautics	1061159
14:00-14:15	Research on scheme of maglev-rotor UAV Yantao Liu,Qiang Sun,Weigui Zhong,Yongfei Yang,Wang Xie China Helicopter Research & Develop Institude	1037645 NO SHOW
14:15-14:30	Wing Selection and Dynamic Derivative Estimation of a Tailless UAV Tianji Ma,Da Huang Nanjing University of Aeronautics and Astronautics	1030774
14:30-14:45	Simulation of a Tandem Wing System for a UAV Using a High Reynolds Number LBM Code Yasuo Obikane[1],Khemedekh Lochin[2] 1.Hue Industrial College 2.Mongolia university of science and technology	1016957
	Session6-2 UAV 2 Chair: Prof. Zhenxun Gao	
14:45-15:00	Aerospace and Mechanical Engineering Education using UAV and UAS (Sky infra-in-Vietnam Project) Yasuo Obikane[1],Nguyen H. Chuc[1],Nguyen V. Anh[1],Dinh T. Trong[1],Jun Sato[2],Tran H. Thang[2] 1.Hue Industrial College 2.Turuoka National technical College	1049312
15:00-15:15	Design and Flight Test Validation of a Rotor/Fixed-Wing UAV Peixing Niu,Xiaoguang Li Nanjing University of Aeronautics and Astronautics	1030809
15:15-15:30	Effects of distributed propulsion crucial variables on aerodynamic and propulsive performance of small UAV Yiyuan Ma,Wei Zhang,Yizhe Zhang,Ke Li,Yiding Wang Northwestern Polytechnical University	1025780
15:30-15:45	Uncertainty-based Design Optimization of NLF Airfoil for HALE UAVs Huan Zhao,Zhenghong Gao Northwestern Polytechnical University	1035806
	Session6-3 UAV 3 Chair: Prof. Youdan Kim	
16:00-16:15	Path Planning for Multiple UAVs Using Artificial Intelligence Under Changing Environment Eunju Choi,Kyujin Moon,Kuk-Kwon Park,Ho-Jun Kwon,Chang-Kyung Ryoo	1061397

	Inha University	
16:15-16:30	Optimal Path Planning for UAV Patrolling in Forest Fire Prevention Junzhong Zhou,Wei Zhang,Yizhe Zhang,Yuqiang Zhao,Yiyuan Ma Northwestern Polytechnical University	999297
16:30-16:45	Experimental Study on an Arresting Gear for Heavy UAVs on Slippery Runways Yasuo Obikane[1],Narantsatsralt Norolkhoo[2] 1.Hue Industrial College 2.Mongolian University of Science and Technology	1016933
16:45-17:00	Cooperative Formation Control Technology for Manned Unmanned Aerial Vehicles Yu Zheng,Teng Li,Peixing Niu,Mingxi Chen 86 18810951597	1051895
17:00-17:15	Estimation of the load applied to a micro aircraft flying in the heavy rain Masafumi Yamazaki[1],Koichi Sakata[1],Takahito Saruhashi[1],Shigeo Kimura[1],Hiroyuki Abe[2], Katsuaki Morita[3],Kengo Sato[4],Naoki Sakai[4] 1.Kanagawa Institute of Technology 2.National Institute of Advanced Industrial Science 3.Nippon Paint Surf Chemicals Co.，Ltd. 4.National Research Institute for Earth Science and Disaster Resilience	1062055
Session6-4 Aircraft Structural Design Chair: Prof. Sangchul Lee		
17:15-17:30	A Design Method of Civil Commercial Aircraft Cabin Integration Based on System Engineering Thought Zhaoliang zou,Xu Zhang,Dayong Dong COMAC ShangHai Aircraft Design and Research Institute	1058850 NO SHOW
17:30-17:45	Design of Wave Rider Based on Shock Fitting Method Guoliang Li,Anlong Gong,Chuqun Ji,Yunjun Yang,Weijiang Zhou China Academy of Aerospace Aerodynamics	1088610
17:45-18:00	Research on Civil Aircraft Design based on MBSE Yunong Wang,An Zhang,Delin Li Northwestern Polytechnical University	1061550
18:00-18:15	Waveriders designed for given planform leading edge curves Xiaoyan Wang[2,3],Jun Liu[2,3],Shaohua Chen[2,3] 1.National university of defense technology 2.College of Aerospace Science and Engineering，National University of Defense Technology 3.Science and Technology on Scramjet Laboratory，National University of Defense Technology	1037686
18:15-18:30	On Aircraft Design under the Consideration of Hybrid-Electric Propulsion Systems D. Felix Finger[1],Falk Goetten[1],Carsten Braun[2],Cees Bil[1] 1.RMIT University 2.FH Aachen UAS	1045881
Oct. 17 A.M.		
Session6-5 Aircraft design optimization 1 Chair: Prof. Cees Bil		
8:30-8:45	Aerodynamic/Stealthy Integrated Design Optimization of Airfoil for Supersonic Fighter ZhongYuan Liu Northwestern Polytechnical University	1061720
8:45-9:00	Aero-Structural Optimization of a Supersonic Wing Model Using Adjoint-based Optimization Algorithm Jingrui Guo,Min Xu,Yi Li Northwestern Polytechnical University	1056785
9:00-9:15	Drag Reduction of Transonic Wings with Surrogate-based Optimization Jichao Li,Jinsheng Cai,Kun Qu Northwestern Polytechnical University	1054787
9:15-9:30	Multi-Disciplinary Optimization of Large Civil Aircraft Using a Coupled Aero-Structural Adjoint Approach Jiangtao HUANG[1],Jing YU[1],Zhenghong GAO[2],Zhu ZHOU[1],Biaosong CHEN[3] 1.China Aerodynamics Research and Development Center 2.Northwestern Polytechnical University 3.Dalian University of Technology	1030616
Session6-6 Aircraft design optimization 2 Chair: Prof. Jiangtao Huang		
9:45-10:00	Aerodynamic Shape Optimization of the Common Research Model based on Improved SQP Algorithm Jing Yu,Jiangtao Huang,Dong Hao,Zhu Zhou China Aerodynamics Research and Development Center	1009191
10:00-10:15	Aerodynamic Shape Optimization with Effective Design Space Wei Zhang Northwestern Polytechnical University	1054969
10:15-10:30	Research on Aerodynamic Optimization Design Considering the Stability of Aircraft Yibo Kang,Lu Xia,Meihua Yang,Baigang Mi Northwestern Polytechnical University	982309
10:30-10:45	Research on Optimal Design Method of Tilt-Rotor Electric Propulsion System Dengyan Duan,Hong Zhao,Minghua Peng,Jianbo Li Nanjing University of Aeronautics and Astronautics	1058339
Session6-7 Aircraft design optimization 3 Chair: Prof. Jiangtao Huang		
11:00-11:15	Low Boom Supersonic Aircraft Configuration Optimization Using Inverse Design Method Yidian Zhang[1],Jiangtao Huang[2],Zhenghong Gao[1] 1.Northwestern Polytechnical University 2.China Aerodynamics Research and Development Center	1025775
11:15-11:30	Efficiency Estimation of Formation Flight Types Tao Yang,Liu Zhiyong,Xiong Neng,Sun Yan,Lin Jun China Aerodynamic Research and Development Center	1037629
11:30-11:45	Productivity Analysis and Optimization of Aircraft Assembly Line Based on Delmia-Quest Heng Zhong,Jun Hu,Shuntao Liu,Xinyun Shao Chengdu Aircraft Industrial (Group) CO.，LTD	1059434
11:45-12:00	The Optimization Design of Lift Distribution and Propeller Performance for Rotor-Wing Compound Helicopter XiaoXin Liu,Lili Lin,Minghua Peng,Jianbo Li Nanjing University of Aeronautics and Astronautics	1058291
Oct. 17 P.M.		
Session6-8 Aircraft wing design Chair:Dr. Huan Zhao		
13:30-13:45	Aerodynamics and Structural Design Studies for Main Wing on Subsonic Aircraft Hitoshi Arizono[1],Keisuke Ohira[2]	1062135

	1.Japan Aerospace Exploration Agency 2.Ryoyu Systems	
13:45-14:00	Novel waverider design method derived from three-dimensional leading edge Xiaoyan Wang[2,3],Jun Liu[2,3],Xiang Fu[2] 1.National university of defense technology 2.College of Aerospace Science and Engineeing，National University of Defense Technology 3.Science and Technology on Scramjet Laboratory，National University of Defense Technology	1037716 NO SHOW
14:00-14:15	Research on Morphing Scheme and Forward-Swept Wing Parameters Based on a Forward-Swept Wing Xuefei Li,Zhansen Qian,Chunpeng Li,Xianhong Xiang,Pengbo Xu AVIC Aerodynamics Research Institute	1048714
14:15-14:30	Study on the Effects of Toe Angle of Upward Pointing and Downward Pointing Winglets Kazuhiro Kubota[1],Kenichi Rinoie[1],Tatsunori Yuhara[2] 1.The University of Tokyo 2.Japan Aerospace Exploration Agency	1058343
14:30-14:45	Design and Analysis of a Morphing Wing Concept Cees Bil[1],Tijs Booij[2] 1.RMIT University 2.University of Twente	1058264
	Session6-9 Aircraft modeling Chair: Dr. Qijia Yun	
14:45-15:00	Evaluating the Combat Effectiveness of Anti-Ship Missile in Cooperative Operation Qijia Yun,Bifeng Song,Yang Pei Northwestern Polytechnical University	1057491
15:00-15:15	OrbitPlus Open Cubesat Platform Feasibility Study and Preliminary System Design Ahmadloo Hamed[3,1],Mazinani Alireza[3,2],Pourdaraei Sara[3,2],Bayat Mohammadreza[3,2],Naderi Mahyar[3,2],Sherkatghanad Ehsan[3,2] 1.Beijing Institute of Technology 2.Beihang university 3.OrbitPlus Technology Group	1065346
15:15-15:30	Research on Flight Dynamic Modeling and Interference of Components for Rotor/Wing Compound Helicopter Lili Lin,Xiaoxin Liu,Minghua Peng,Jianbo Li NUAA	1058302
15:30-15:45	Security Analysis of Mars Lander Heat Shield Separation Guowu XU First Institute	979048
15:45-16:00	Research on a modeling method of ducted propulsion system for vertical take-off and landing aircraft Min Chang[1],Weixiang Zhou[2],Bo Peng[3],Junqiang Bai[1] 1.Unmanned System Research Institute，Northwestern Polytechnical University 2.School of Aeronautics ，Northwestern Polytechnical Univeristy 3.School of Aeronautic Science and Engineering，Beihang University	1062013
	Session6-10 Algorithm for analysis and calculation 1 Chair: Dr. Falk Gotten	
16:00-16:15	Empirical Correlations for Geometry Build-Up of Fixed Wing Unmanned Air Vehicles Falk Goetten,Dominik Felix Finger,Carsten Braun,Marc Havermann,Cees Bil,Francisco Gómez RMIT University Melbourne	1017274
16:15-16:30	High Subsonic NLF Airfoil Design at Low Reynolds Number Jing Li[1],Zhenghong Gao[2] 1.Zhengzhou University 2.Northwestern Polytechnical University	1035874
16:30-16:45	Hybrid Unstructured Mesh Deformation based on Massive Parallel Processors Hongyang Liu[1],Jiangtao Huang[1],Qing Zhong[2],Jing Yu[1] 1.China Aerodynamics Research and Development Center 2.Luoyang Electronic Equipment Test	1023472
16:45-17:00	Inverse airfoil design algorithm based on multi-output least-squares support vector regression machines Xinqi Zhu,Zhenghong Gao Northwestern Polytechnical University	1024956
17:00-17:15	Prediction Formula of Axisymmetric Modes of Screech Tones Utilizing Data from Numerical Simulation IN CHEOL LEE[1],DUCK JOO LEE[2] 1.BASTRI of Commercial Aircraft Corporation of China 2.Korea Advanced Institute of Science and	1061386
	Session6-11 Algorithm for analysis and calculation 2 Chair: Dr. Qian Zhao	
17:15-17:30	Large Eddy Simulation of Supersonic Open-Cavity Flow Feng Feng China Academy of Aerospace Aerodynamics	1035112
17:30-17:45	Radar Cross Section Gradient Calculation Based on Adjoint Equation of Method of Moment Lin Zhou[1],Jiangtao Huang[2],Zhenghong Gao[1] 1.Northwestern Polytechnical University 2.China Aerodynamics Research and Development Center	1033392
17:45-18:00	Ranking Method for the Importance of Aircraft Damage Spare Parts Qian Zhao,Yang Pei,Peng Hou,Chen Tian Northwestern Polytechnical University	1046318
18:00-18:15	Research on Edge Computing Architecture for Intelligent NC Machining Monitoring CPS Shaochun Sui,Xiaohua Li,Wenyi Li Chengdu Aircraft Industry (Group) Co.，Ltd.	1039952
18:15-18:30	Simulation Analysis of Heading Load of drop Test Zihao Zhang,Xiaohui Wei Nanjing University of Aeronautics and Astronautics	1061453
18:30-18:45	A CLASSIFICATION AND SUMMARY OF DEGRADATION PROCESS MODEL Long Li,Tianxiang Yu,Bifeng Song,Yijian Chen Northwestern polytechnical unversity	1022291

Track 7   Cheng Hua Room (5th Floor)

Oct. 16 P.M.

	Session7-1 Advanced Control Theory Chair: Mr. Atsushi Satoh	
13:30-13:45	Nonlinear Disturbance Observer-Based Attitude Controller Design for Exoatmospheric DACS Type Missile Jaeho Lee,Seokwon Lee,Sungjun Ahn,Suwon Lee,Youdan Kim Seoul National University	1010715
13:45-14:00	Dynamic envelope and its characteristics under scheduled control law Wuji Zheng,Yinghui Li,Dengcheng Zhang,Chi Zhou,Pengwei Wu,Zehong Dong Air Force Engineering University	1037673
	Attitude Control Law Design of Experimental Winged Rocket Using Engine Gimbal Control	

14:00-14:15	Tomonori Sugimachi,Koichi Yonemoto,Takahiro Fujikawa Kyushu Institute of Technology	1060601
14:15-14:30	Path Control for a Statically Stable Bullet Under Wind Conditions Seong-Min Hong[1],Min-Jea Tahk[1],Sanghyuk Park[2],Yunyoung Kim[2] 1.KAIST 2.LIG Nex1	1061387
14:30-14:45	Robust Attitude Control System Design for a Distributed Propulsion Tilt-Wing UAV in Flight State Transition Siqi Wang,Bifeng Song,Lei He Northwestern Polytechnical University	1051947
Session7-2　Guidance 1　Chair: Prof. Seiya Ueno		
14:45-15:00	Optimal Linear-Quadratic Guidance Law Considering Autopilot First-order Lag with Terminal Acceleration Constraint Duo Zheng[1],Xinghua Xu[4],Defu Lin[2],Ruyi Yan[3] 1.Beijing Electro-mechanical Engineering Institute 2.Beijing Institute of Technology 3.Unit 95806，PLA Air Force 4.Beijing Institute of Automatic Control Equipment	1039782
15:00-15:15	Optimal Waypoint Planning for Gliding Vehicles using Particle Swarm Optimization Suwon Lee,Namhoon Cho,Jinrae Kim,Youdan Kim Seoul National University	1003987
15:15-15:30	A Lattice Path Following Algorithm for Guided Missiles Young-Jae Oh,Heekun Roh,Min-Jea Tahk Korea Advanced Institute of Science and Technology	1058833
15:30-15:45	Cooperative Interception of Multiple Missiles for a Highly Manoeuvrable Aircraft Target Chen Tian,Yang Pei,Peng Hou,Qian Zhao Northwestern Polytechnical University	1024593
15:45-16:00	Research on Closed-loop Guidance Method of Simultaneous Method Based Trajectory Optimization Feng QIU,Hao-yang WANG,Wei SHANG,Qing-feng SHI China Academy of Launch Vehicle Technology R&D Center	1008826 NO SHOW
Session7-3　Simulation Software & Applications　Chair: Dr. Chen Tian		
16:00-16:15	Analysis of the Application of Touch Screen in Civil Aircraft Cockpit Xiaoli Wang,Jiong Zhang,Rui Zeng Beijing Aeronautical Science & Technology Research Institute，COMAC	1061182
16:15-16:30	Aero-optical effects simulation based on turbulence vortex model Ketian Shi,Jiatong Shi,Handong Ma China Academy of Aerospace Aerodynamics	1019767
16:30-16:45	Study on Optimization Tool Development for Flight Control Law Design Hojun Kwon[1],Kyujin Moon[1],Jisoo Kang[1],Byung-Mun Min[2],Chang-Kyung Ryoo[1] 1.Inha University 2.Inha Technical College	1062100
Session7-4　Assessment & Verification　Chair: Dr. Takeshi Tsuchiya		
17:15-17:30	Air combat target threat assessment method on belief function theory Guojing Xu[1,2],Shiyu Wang[3],Xinyang Deng[3],Wen Jiang[3] 1.China National Aeronautical Radio Electronics Research Institute 2.Science and Technology on Avionics Integration Laboratory 3.Northwestern Polytechnical University	1023006
17:30-17:45	PIO Engineering Prediction Methods and Verification of Airworthiness Compliance for Civil Aircraft Jun Liu,Nanbo Xu COMAC	1051007
17:45-18:00	Studies on the Tracking Performance of Off-axis Pitch/Yaw Gimbal Seeker in Roll Motion Gun-Hee Moon,Dong-Yeon Lee,Min-Jea Tahk Korea Advanced Institute of Science and Technology	1021183
18:00-18:15	The integrated performance enhancement system for electro-optical payloads Sangyoun SHIN[1],Hyoungho Ko[2] 1.Korea Aerospace Research Institute 2.Chungnam National University	1062069 NO SHOW
18:15-18:30	Cooperative Indoor Space Exploration by Multiple Micro Aerial Vehicles with Connectivity Constraints Kohei Umeki[1],Daisuke Kubo[2],Takeshi Tsuchiya[1] 1.The University of Tokyo 2.Japan Aerospace Exploration Agency	1060585
18:30-18:45	An Analysis of AOA-Maintained APCS in H-dot Automatic Carrier Landing System Ran Dong[1],Na Li[2],Xu Dong[3] 1.College of Information Engineering，Beijing Institute of Petrochemical Technology 2.Aviation System Research Department，SERI 3.College of Shipbuilding Engineering，Harbin Engineering University	1033029
Oct. 17 A.M.		
Session7-5　Aircraft Test 2　Chair: Dr. Jian Fu		
8:30--8:45	Helicopter Iron Bird Test Technology Research Chong Qin AVIC	1015761 NO SHOW
8:45-9:00	Design and Test of Plasma Control Surface on Unmanned Aerial Vehicle Jiageng Cai,Chang Li,Huaxing Li Department of Fluid Mechanics，Northwestern Polytechnical University	1059630
9:00-9:15	A Pilot development of Failure Monitoring System for Drone Components using the UAVCAN Yunbin Lee,Sangho Ko Korea Aerospace University	1060976
Session7-6　Flight control 1　Chair: Dr. Takeshi Tsuchiya		
9:45-10:00	Computational Cost Evaluation of the Flight Controller using Multi-Hierarchy Dynamic Inversion for Winged Rocket Takahiro Matsukami,Yonemoto Koichi,Takahiro Fujikawa,Kento Shirakata Kyushu Institute of Technology	1061264
10:00-10:15	Control Allocation Approach Study for BWB Aircraft Ning Zhang[1],Feng Li[2],Lixin Wang[1] 1.Beihang University 2.China Academy of Aerospace Aerodynamics	1014648
10:15-10:30	Study on Integrated Flight / Propulsion Control Method of Compound Adjustable Ducted Rocket Feichao Cai[1],Mingyu Shao[2] 1.Northwestern Polytechnical University 2.Shandong University of Technology	1059331

10:30-10:45	Flight path angle controller design based on adaptive backstepping terminal sliding mode control method Yang Wei,Hao Jun Xu,Yuan Xue,Zhe Li,Hong Feng Tian Air Force Engineering University	1067649
Session7-7 Flight control 2 Chair: Dr. Takeshi Tsuchiya		
11:00-11:15	Stochastic Model Predictive Control for Collision Avoidance and Landing of Aircraft YUJI SHIMIZU[1],TAKESHI TSUCHIYA[1] 1.The University of Tokyo 2.The University of Tokyo	1030704
11:15-11:30	Control Design for Morphing Aircraft Based on Frequency-Apportioned Control Allocation Hanna Lee,Jihoon Lee,Seong-hun Kim,Seungyun Jung,Youdan Kim Seoul National University	1015439
11:30-11:45	Safety envelope determination for impaired aircraft during landing phase based on reachability analysis Chi Zhou,Yinghui Li,Wuji Zheng,Pengwei Wu,Zehong Dong Air Force Engineering University	1054060
11:45-12:00	Research on Application of the Distributed Control Technology in the Aircraft Integrated Control Systems Yuwei Cui AVIC Xi'an Flight Automatic Control Research Institute	1017759
Oct. 17 P.M.		
Session7-8 Control and Decision Chair: Ms. Ying Cao		
13:30-13:45	OWA aggregation of multi-criteria on the framework of Z-valuation Guojing Xu[1],Yue Chang[2],Xinyang Deng[2],Wen Jiang[2] 1.cience and Technology on Avionics Integration Laboratory; China National Aeronautical Radio Electronics Research Institute 2.Northwestern Polytechnical University	1025063
13:45-14:00	Fast combination method for dependent evidences in the framework of hyper-power sets Jing Zhao,Xin Guan,Haiqiao Liu Navy Aviation University	1058295 NO SHOW
14:00-14:15	A Generalization of Jeffrey's Rule in the Interval-Valued Dempster-Shafer Framework Guojing Xu[1],Ying Cao[2],Wen Jiang[2],Xinyang Deng[2] 1.Science and Technology on Avionics Integration Laboratory，Shanghai 200233，China; China National Aeronautical Radio Electronics Research Institute，Shanghai 200233，China 2.School of Electronics and Information，Northwestern Polytechnical University，Xi'an，Shaanxi Province，China 710072	1025059
Session7-9 Flow Control Chair: Dr. Zhiyong Liu		
14:45-15:00	Towards a Concept of Free Routing in the Northeast Asia/Pacific Region Mark Brown[1],Keumjin Lee[2],Hiroko Hirabayashi[1] 1.Electronic Navigation Research Institute2.Korea Aerospace University	1001089
15:00-15:15	A Graph Search-Based Trajectory Optimizer for Practical Wind-Optimal Trajectories Mark Brown,Hiroko Hirabayashi,Navinda Wickramasinghe Electronic Navigation Research Institute	1052191
15:15-15:30	Robust Scheduling Algorithm for Point Merge System Considering Uncertainty in Estimated Time of Arriv Somang Lee,Youkyung Hong,Youdan Kim Seoul National University	1020811
15:30-15:45	Real-time traffic flow formation of multiple aircraft using distributed model predictive control Kotaro Kakehashi,Nobuhiro Yokoyama National Defense Academy	1054312
Session7-10 Aerodynamics optimization 2 Chair: Prof. Jae-Woo Lee		
16:00-16:15	Numerical Study with Designing Passive Flow Control Devices for Cooling Axial Fan Motor Wooje Kang,Hyungyu Lee,Jinsoo Cho Hanyang University	1061448
16:15-16:30	Aerodynamic Coefficient Prediction of Airfoils with Convolutional Neural Network Zelong Yuan*1,Yixing Wang2,Yasong Qiu1,Junqiang Bai1,Gang Chen2 1.School of Aerodynamics，Northwestern Polytechnical University，Xi'an，China 2.School of Aerospace，Xi'an Jiaotong University，Xi'an，China	1061442
16:30-16:45	A Data Fusion Method using Combined Variable Fidelity Modeling and Space Mapping for Aerodynamic Database Mukyeom Kim, Maxim Tyan, Vinh Pham, Nadhie Juliawan, Sangho Kim, Jae-Woo Lee konkuk univ.	1015326
Session7-11 Navigation Chair: Prof. Seiya Ueno		
17:15-17:30	Attitude/position estimation of monocular vision based on multiple model Kalman filter Hao Li,Qiang Tang,Jia Li AVIC Xi'an fight automatic control research institute(Facir)	1026070
17:30-17:45	Deep Convolutional Neural Network For Infrared Image Automatic Target Recognition Pilwon Kwak,Hyochoong Bang KAIST	1018763
17:45-18:00	Calculation of GNSS GBAS Protection Level Based on Four-Parameter Stable Distribution Model Jinming Song,Rui Xue,Lei Zheng School of electronic and information engineering，Beihang University	1018743
18:00-18:15	Service Continuity Assessment of Beidou Satellite Navigation System Shuo Wang,Rui Xue,Lei Zheng Beihang University	1033673
18:15-18:30	Tracking GNSS signals in Low Earth Orbit missions Sara Pourdaraei,Hong Lei Qin,Tian Jin Beihang university	1062145