

## Agenda

## 2017 July 26<sup>th</sup>

Opening Ceremony					
Host: SJTU Students					
9:00- 9:10	ICASSE 2017 Introduction	Ping Lu			
9:10- 9:20	Welcome Speech	SJTU VP			
9:20-9:50	Keynote Speech I:	Ping Lu			
	Computational Guidance and Control				
9:50-10:20	Photo & Tea break				
10:20-10:50	Keynote Speech II: Information Fusion and Sensor Network Surveillance	Henry Leung			
Session 1: Aerospace System					
Session Chair : Ping Lu					
10:50-11:05	Application of Mathematical Modeling for Certification of Superjet-100 Airplane	Dmitry Yu. Strelets			
11:05-11:20	Parameter Identification for Hyperelastic Model of Pneumatic Actuator Based on Flexible-Matrix-Composite	Zhefeng Yu			
11:20-11:30	An Innovative and Efficient Shock Absorber and Its Application to the Aircraft Seat	Yi Fu			
11:30-11:40	Experimental Investigation of Output Voltage of Vibration Based Piezoelectric Ceramics under Various Loading and Thermal Conditions	Saqlain Abbas			
11:40-11:50	Compensation-Modification Method for Surface Effects in Non-Local State-Based Peridynamic	Zhuoyue Zhang			
11:50-13:30	Lunch				
13:30-14:00	Keynote Speech III:  Mission Design of Deorbiting Spacecrafts using Electrodynamic Tethers (DESCENT)	George Z. H. Zhu			
	Session 2: Information and Control				
	Session Chair : Shufan Wu				
14:00-14:15	Transition Control of the Blasius Boundary Layer Using Passivity	Christopher Damaren			
14:15-14:30	Wildfire Autonomous Hotspot Detection Using a Fixed Wing UAV	Hugh Liu			
14:30-14:45	Dynamical Reconstruction of Remotely Measured	Christophe Baehr			

	Random Media. Application to the Atmospheric	
	Turbulence	
14:45-15:05	Tea break	
15:05-15:20	Linear Parameter-Varying Proportional-Integral	Bei Lu
	Control Design for the Longitudinal Motion of an	
	F-16 Aircraft	
15:20-15:35	New Challenges for Developing Civil Aircraft	Gang Xiao
	Environmental Surveillance System	
15:35-15:50	Motion Planning of Variable Geometry Truss Space	Yongsheng Yang
15:55-15:50	Manipulator	
15:50-16:00	LQR and SMC Based Stick-force Tracking Control	Xianglong Liangqing
	of Active Sidesticks in Human-in-the-loop System	
16:00-16:10	Lattice Flocking of multi-Quadrotor System: an	Zi'an Ning
	Algorithm Based on Artificial Potential Field	
16:10-16:20	Survey of Active Inceptor Control System	Zilin Huang
	Technology	
16:20-18:00	Rest	
18:00-20:00	Banquet (Welcome Dinner)	

## 2017 July 27<sup>th</sup>

	Keynote Speech IV:	Tom I-Ping Shih		
9:00-9:30	Challenges in Designing Gas-Turbine Cooling			
	Systems			
9:30-10:00	Keynote Speech V:	Guangjun Liu		
	Development of Modular and Reconfigurable Robot			
	with Multiple Working Modes			
10:00-10:20	Tea break			
Session 3: Fluid Dynamics and Propulsion				
Session Chair : Hugh Liu				
10:20-10:35	Compression Computational Grid for Acoustic	Wei Ma		
	Source Localization			
10:35-10:50	Coupled Hydrodynamic and Aerodynamic	Lang Zhang		
	Performance Analysis of Seaplane Take-off Process			
	in Calm Water			
10:50-11:05	An Experimental Investigation on the Kinetic Energy	Wei Tian		
	Transport in the Flow around a Wind Turbine Model			
11:05-11:20	Aero-Optical Effects of Front Step for Supersonic	Boyang Xing		
	Flight			
11:20-11:30	Shock Mach Number Effect on the Mixing and	Bin Yu		
	Combustion Performance in Reactive Shock Bubble			

	Interaction			
11:30-11:40	Quasi One Dimensional Modelling and Optimization	Di Lu		
	of Hydrogen Fuelled Scramjet			
11:40-11:50	On the Total Pressure Loss Induced by the	Yaru Tian		
	Interaction between the Oblique Shock Wave and a			
	Sonic Hydrogen Jet in Supersonic Crossflow for			
	Mixing Enhancement			
11:50-12:00	Reynolds Number Influence on the Backpressure	Yuan Ji		
	Induced Shock-boundary Layer Interaction in an			
	Asymmetric Supersonic Expansion Flow			
12:00-13:30	Lunch			
10.00.11.00	Keynote Speech VI:	Greg Wyler		
13:30-14:00	Enabling Internet Access for All			
14.00.14.22	Keynote Speech VII:	Christopher Damaren		
14:00-14:30	Optimal Control of Hybrid Aerospace Systems	1		
14:30-14:50	Tea Break			
	Session 4: Space Technology			
	Session Chair : George Z. H. Zhu			
14:50-15:05	Small Satellite Formations for Applications in	Klaus Schilling		
14.30-13.03	Communication and Earth Observation			
15:05-15:20	The need for In Flight Testing and in Orbit	Jean Muaylert		
15.05-15.20	Demonstration for future Space Vehicle Design			
	Measurement of Reflected GNSS Signals using	Deren Gong		
15:20-15:35	HiSGR Receiver: Preliminary Results in			
	Experiments			
15:35-15:50	A Survey on Micro/Nano Satellite Technologies and	Shufan Wu		
13.33-13.30	Applications in China			
	A Unified Formulation of Linear Complementary	Tianjian Hu		
15:50-16:05	Problem for Space Robot Dynamics with Stick-Slip			
	Constraint			
16:05-16:15	An Overview of the Configuration and Manipulation	Lingfeng Qiao		
10.03-10.13	of Soft Robotics for On-Orbit Servicing			
16:15-16:25	Electromagnetic Isolation and Electrical Protection	Botao Xu		
10:13-10:23	in Spacecraft General Assembly			
16:25-16:40		Presenters of awards:		
	<b>Student Best Paper Awarding Ceremony</b>	Ping Lu,		
		Zhongliang Jing		
16:40-16:50	Closing Remark	Xingqun Zhan		