The 5th Forum for New Leaders in Space Science

December 2-3, 2016

(Version 2.2)

Draft Agenda:

December 1, 2016

Registration	**13:00-18:00**	**Lobby of Liaoning Hotel**
Welcome Reception	18:30-22:00	TBD

December 2, 2016

INTRODUCTION: ***Chairman: Ji WU, NSSC, NAS***		
Time	**Subject**	**Contributor**
09:00-09:10	Opening Remark	TBD, CAS, China
09:10-09:20	Opening Remark	Ji WU, NSSC, CAS, China
09:20-09:30	Opening Remark	Michael MOLONEY, NAS, USA
09:30-09:50	Invited Speech	Mingxiang PAN, Institute of Physics, CAS, China
09:50-10:00	Discussion	
SESSION I: ***Chairman: Mingxiang Pan, Institute of Physics, NAS***		
10:00-10:20	Crystallization Kinetics of Liquid Metastable−Stable Transitions in Colloids and the Ostwald's Step Rule	Shenghua Xu, Institute of Mechanics, CAS, China
10:20-10:30	Discussion	
10:30-10:50	*Group Photo and Coffee Break*	
10:50-11:10	Design and Optimization of Cold Atom Interferometer Based Weak Equivalence Principle Test in the China Space Station	Xi CHEN, Wuhan Institute of Physics and Mathematics, CAS, China
11:10-11:20	Discussion	

11:20-11:40	A Sliding Cell Technique for Diffusion Measurements in Liquid Metals	Bo ZHANG, Hefei University of Technology, China
11:40-11:50	Discussion	
11:50-12:10	The Research of Space Life Science Experimental Facilities Technology	Fangwu LIU, Shanghai Institute of Technical Physics,CAS, China
12:10-12:20	Discussion	
12:20-14:00	*Lunch*	
SESSION II: ***Chairman: Peter VOORHEES, Northwestern University, USA***		
14:00-14:20	Transcriptome Analysis of 4 Arabidopsis Ecotypes Grown on the International Space Station Identifies Core Spaceflight Response Genes	Richard J. BARKER, University of Wisconsin Madison, USA
14:20-14:30	Discussion	
14:30-14:50	Utilizing NASA GeneLab Data to Seek Novel Gravity Sensory Components in Arabidopsis	Ting LI, California Institute of Technology,USA
14:50-15:00	Discussion	
15:00-15:20	Spaceflight Root Morphometrics Uncovers Fundamental Plant Patterning Processes	Eric SCHULTZ, University of Florida, USA
15:20-15:30	Discussion	
15:30-15:50	Arabidopsis Transcriptome Pattern in Response to Low Atmospheric Pressure, a Novel Abiotic Stress	Mingqi ZHOU, University of Florida, USA
15:50-16:00	Discussion	
16:00-16:20	*Coffee Break*	
16:20-16:40	Observing the Kinetic Signature of Turbulent Damping in Numerical Simulations and Solar Wind Observations	Kristopher G. KLEIN, University of Michigan, USA
16:40-16:50	Discussion	
16:50-17:10	The Effect of Microgravity Environment on Stem Cells Growth and Differentiation Fate	Xiaohua LEI, Institute of Zoology, CAS, China
17:10-17:20	Discussion	
17:20-18:30	Guided Tour of the Drop Tower	
18:30-20:00	*Formal Dinner*	

December 3, 2016

SESSION III: ***Chairman: Mian LONG, Institute of Mechanics, CAS***		
Time	**Subject**	**Contributor**
09:00-09:20	Solidification in Microgravity: Insights into Ground-Based Processing	Peter VOORHEES, Northwestern University, USA
09:20-09:30	Discussion	
09:30-09:50	Invited Presentation	Mian LONG, Institute of Mechanics, CAS, China
09:50-10:00	Discussion	
10:00-10:20	Blood Pressure Regulation in Microgravity: Sympathetic Activation or Vascular Transduction?	James PAWELCZYK, Pennsylvania State University, USA
10:20-10:30	Discussion	
10:30-10:50	*Coffee Break*	
10:50-11:10	Experimental Evaluation of Astronaut Vision Changes in Long-Dration Spaceflight	Allison ANDERSON, Dartmouth College Geisel School of Medicine, USA
11:10-11:20	Discussion	
11:20-11:40	Effect of Microgravity on Growth of Plant Cell	Peipei XU, Institute of Plant Physiology& Ecology, CAS, Chinese
11:40-11:50	Discussion	
11:50-14:00	*Lunch*	
SESSION IV: ***Chairman: James PAWELCZYK, Pennsylvania State University***		
14:00-14:20	Human Orientation Perception and Control are Impaired by, but Adapt to, Exposure to Altered Gravity Environments	Torin K. CLARK, University of Colorado at Boulder, USA
14:20-14:30	Discussion	
14:30-14:50	A Generalized Target Model: Useful Tools in Radiation Risk Assessment of Solar Particle Event for Astronauts	Lei ZHAO, Dalian Maritime University, China
14:50-15:00	Discussion	

15:00-15:20	Microbial Diversity is Greatly Reduced when Community is Exposed to UV Radiation	Heather D. SMITH, NASA Ames Research Center, USA
15:20-15:30	Discussion	
15:30-15:50	Proteomic Study on the Synergetic Biological Effects of Space Radiation and Microgravity by C.elegans	Wei WANG, Dalian Maritime University, China
15:50-16:00	Discussion	
16:00-16:30	General Discussion	
16:30-16:40	Conclusion	Peter VOORHEES, Northwestern University, USA
16:40-16:50	Conclusion	Ji WU, NSSC, CAS, China