

# A Report on the Conference

Date: 2020 / 01 / 20

Name: 江亦穎	Department: 機械與機電工程學系
<p>參加會議經過:</p> <p>此次參加 AIAA Science and Technology Forum and Exposition (AIAA SciTech Forum) 為 AIAA 於 2020 年度的盛會，舉辦於美國奧蘭多的 Hyatt Regency Convention Center，主要活動為期五天，2020 年 1 月 6 日至 1 月 10 日，我們同行二人與指導教授分別於第四天下午及第五天早上進行論文口頭報告。</p> <p>第一日(1/6):</p> <p>08:00 參加大會開幕，演講主題: Using Space to Support a Sustainable Society</p> <p>09:30 自由參加論文發表場次(同時有 60 場次)，本人分別參與</p> <ol style="list-style-type: none"><li>0930-1000, Experimental Study of CFD Validation Test Case for Turbulent Separated Flows.</li><li>1000-1030, Sliding Mesh and Arbitrary Periodic Interface Approaches for the High Order FR/CPR Method.</li><li>1030-1100, Numerical Simulations of Transonic Flutter on a Three-Dimensional Wing.</li><li>1100-1130, Comparisons of the Aerodynamic Shape Optimization of the Common-Research Model.</li></ol> <p>02:00 下午發表場次</p> <ol style="list-style-type: none"><li>1400-1430, Coarse-Grid Simulations of Hypersonic Boundary Layer Transition: Is It Even Possible.</li><li>1430-1500, Hybrid Reynolds-Averaged/Large Eddy Simulations for the NASA Enhanced Injection and Mixing Project.</li><li>1530-1600, The Evolution of Turbulent Wake Examined Using the Horizontal Visibility Graph.</li></ol> <p>第二日(1/7):</p> <p>08:00 參加大會演講，主題: The Next Giant Leap</p> <p>09:30 上午發表場次</p> <ol style="list-style-type: none"><li>0930-1000, Aerodynamic Shape Optimization for Unsteady Flows: Some Benchmark Problems.</li><li>1000-1030, CFD Modeling of Unmanned Aerial Systems with Cut-cell Grids and Adaptive Mesh Refinement.</li><li>1030-1100, Compressibility Effects in High Speed Turbulent Shear Layers – Revisited.</li></ol> <p>17:30 大會博覽會攤位開幕、參觀</p> <p>第三日(1/8):</p> <p>09:30 上午發表場次</p> <ol style="list-style-type: none"><li>0930-1000, Constructing BADA-like Models of Small Electric UASs from Simulation and</li></ol>	

Flight Tests.

2. 1000-1030, A Numerical Investigation of Parachute Deployment in Supersonic Flow.

14:00 參觀大會博覽會攤位

第四日(1/9):

14:00 下午發表場次

1. 1400-1430, Design and Fabrication of a Battery-Powered Unmanned Aerial Vehicle for Precision Agricultural Monitoring Missions.
2. 1430-1500, Conceptual Design of a Highly-Maneuverable Transitional VTOL UAV with New Maneuver and Control Capabilities.
3. 1500-1530, Parametric Study of Mars Helicopter for Pit Crater Exploration.
4. 1530-1600, An Investigation of Quad-rotor Aircraft Performance under Gust Wind and Heavy Rain Impacts.
5. 1600-1630, On the Optimization Performance Study of Flapping Aerial Vehicle under Heavy Rain Condition.

第五日(1/10):

07:30 前往 Speaker Briefing

09:30 上午發表場次

1. 0930-1000, Experimental Investigation of Dynamic Stall on Pitching Swept Finite-Aspect-Ratio Wings.
2. 1000-1030, A Theory of Stall Hysteresis – Why the Reattachment Angle Is Less Than the Separation Stall Angle.
3. 1030-1100, Predictability of Wall-modeled LES for Reynolds Number Effects of Airfoil Flows at Transonic Buffet and Near-stall Conditions.
4. 1100-1130, Experimental Analysis of a Blown-Wing Configuration during Transition Flight.
5. 1130-1200, 本人論文發表:Aerodynamic Analysis of TRAP Wing under Influence of Heavy Rain Effects.
6. 1200-1230, Harmonic Forcing Amplitude Effects in Globally Unstable Transonic Wing Flow.

**\*Use Times New Roman at font size 12**