

Date	Start Time	End Time	Session	Presentation	Authors	Location
1/6/2020	10:00 AM	10:30 AM	ACD-02: Aircraft System/Subsystem Design and Architecture	A Multi-Design Point Sizing Methodology for Environmental Control Systems	Mingxuan Shi, Yu Cai, Jonathan Gladin, Dimitri Mavris, Georgia Institute of Technology, Atlanta, Georgia, United States	Bayhill 19
1/6/2020	11:00 AM	11:30 AM	GTE-02: Compressors and Fans I	Application of Variational Asymptotic Method for Structural Analysis of Fan Rotor Blades in Boundary Layer Ingesting Flow Field	Mohit Gupta, Manish Pokhrel, Dewey Hodges, Dimitri Mavris, Georgia Institute of Technology, Atlanta, Georgia, United States	Bayhill 21
1/6/2020	2:30 PM	3:00 PM	ACD-05: Structural Design, Analysis, and Optimization	An Efficient Method to Dimensionally Reduce Aperiodic Inhomogeneous 3-D Structures to 1-D Beam-Like Structures	Darshan Sarojini, Mohit Gupta, Dewey Hodges, Dimitri Mavris	Bayhill 19
1/6/2020	2:30 PM	3:00 PM	NDA-03: Reduced-Order Modeling	Non-Intrusive Parametric Reduced Order Modeling using Randomized Algorithms	Dushhyanth Rajaram, Tejas Puranik, Christian Perron, Dimitri Mavris	Celebration 12
1/6/2020	3:00 PM	3:30 PM	ACD-05: Structural Design, Analysis, and Optimization	Adjoint-Based Structural Optimization for Beam-Like Structures Subjected to Dynamic Loads	Darshan Sarojini, Dushhyanth Rajaram, David Solano, Dimitri Mavris	Bayhill 19
1/6/2020	3:30 PM	4:00 PM	ACD-05: Structural Design, Analysis, and Optimization	Structural Sizing of Unconventional Aircraft under Static and Dynamic Aeroelastic Loading	David Solano, Darshan Sarojini, Jason Corman, Dimitri Mavris	Bayhill 19
1/7/2020	10:30 AM	11:00 AM	GNC-10: Control and Autonomy II	Optimally Adhering to Behavioral Priors in Unknown Environments with RRTs	Ethan Evans, Patrick Meyer, Matthew Bays, Dimitri Mavris, Evangelos Theodorou	Bayhill 17
1/7/2020	3:00 PM	3:30 PM	TF-02: Applications and Aircraft for Transformational Flight	Optimal Placement of Airparks for STOL Urban and Suburban Air Mobility	>Lansing Wei, Cedric Justin, Dimitri Mavris	Celebration 13
1/8/2020	10:00 AM	10:30 AM	ACD-10/TF-03: Vehicle and Propulsor Sizing - Methods and Tools	Framework for Design Space Exploration of Novel Propulsion System Architectures	Anusha Harish, Jonathan Gladin, Dimitri Mavris	Orlando Ballroom L
1/8/2020	11:00 AM	11:30 AM	SEN-03: Identification and Machine Learning	Classification, Analysis, and Prediction of the Daily Operations of Airports Using Machine Learning	Eugene Mangortey, Tejas Puranik, Olivia Pinon-Fischer, Dimitri Mavris	Celebration 8
1/8/2020	10:00 AM	10:30 AM	MDO-10: AFRL EXPEDITE MDAO I and Effectiveness-Based Design	Tradespace Exploration and Analysis Using Mission Effectiveness in Aircraft Conceptual Design	Alexander Braafladt, Michael Steffens, Dimitri Mavris	Orlando Ballroom N
1/9/2020	10:00 AM	10:30 AM	SEN-05:Fusion for Air Traffic Management	Application of Machine Learning to the Analysis and Prediction of the Coincidence of Ground Delay Programs and Ground Stops	Eugene Mangortey, Marc-Henri Bleu Laine, Tejas Puranik, Olivia Pinon-Fischer, Dimitri Mavris	Celebration 8
1/9/2020	10:30 AM	11:00 AM	INPSI-03, Integration of Unconventional Propulsion Subsystems	Transient Surrogate Modeling for Thermal Management Systems	Andrew Van Zwieten, Gokcin Cinar, Elena Garcia, Jonathan Gladin, Dimitri Mavris	Bayhill 21
1/9/2020	10:30 AM	11:00 AM	SEN-05:Fusion for Air Traffic Management	Prediction and Analysis of Ground Stops with Machine Learning	Eugene Mangortey, Tejas Puranik, Olivia Pinon-Fischer, Dimitri Mavris	Celebration 8
1/9/2020	11:00 AM	11:30 AM	MDO-17/NDA-13: Physics-Informed Machine Learning for Design	Deep Gaussian Process Enabled Surrogate Models for Aerodynamic Flows	Dushhyanth Rajaram, Tejas Puranik, Ashwin Renganathan, Woong Je Sung, Olivia Pinon-Fischer, Dimitri Mavris, Arun Ramamurthy	Celebration 5
1/9/2020	11:00 AM	11:30 AM	APA-30: Aerodynamic Design and Analysis II	Sensitivity of Boundary Layer Ingestion Effects to Tube and Wing Airframe Design Features	Jai Ahuja, Dimitri Mavris	Barrel Spring I
1/9/2020	2:00 PM	2:30 PM	IS-18: Learning Reasoning and Data Driven Systems II	Application of Machine Learning Techniques to Parameter Selection for Flight Risk Identification	Eugene Mangortey, Dylan Monteiro, Jamey Ackley, Zhenyu Gao, Tejas Puranik, Michelle Kirby, Olivia Pinon-Fischer, Dimitri Mavris	Celebration 11
1/9/2020	2:30 PM	3:00 PM	IS-18: Learning Reasoning and Data Driven Systems II	An Application of DBSCAN Clustering for Flight Anomaly Detection During the Approach Phase	Kevin Sheridan, Tejas Puranik, Eugene Mangortey, Olivia Pinon-Fischer, Michelle Kirby, Dimitri Mavris	Celebration 11
1/9/2020	4:00 PM	4:30 PM	AA-10: Airframe/Propulsion Integration	Improved Noise Abatement Departure Procedure Modeling for Aviation Environmental Impact Assessment	Dongwook Lim, Ameya Behere, Yee-Chan Jin, Yongchang Li, Michelle Kirby, Zhenyu Gao, Dimitri Mavris	Bayhill 19
1/9/2020	4:30 PM	5:00 PM	AA-10: Airframe/Propulsion Integration	Sensitivity Analysis of Airport level Environmental Impacts to Aircraft thrust, weight, and departure procedures	Ameya Behere, Dongwook Lim, Yongchang Li, Yee-Chan Jin, Zhenyu Gao, Michelle Kirby, Dimitri Mavris	Bayhill 19
1/10/2020	2:00 PM	2:30 PM	MDO-22: Topology and Shape Optimization II	Development of a Conditional Generative Adversarial Network for Airfoil Shape Optimization	Gabriel Achour, Woong Je Sung, Olivia Pinon-Fischer, Dimitri Mavris	Celebration 2