

ISABE 2017 - Provisional Programme

ISABE-2017 Monday, 04 Sep 2017

	Auditorium	Exchange-1	Exchange-2	Exchange-3	Exchange-4	Exchange-5	Exchange-6	Exchange-7
0930-1000	Welcome							
1000-1100	Keynote-1 / Rolls-Royce							
1100-1200	Keynote-2 / ATI							
1200-1245								
1245-1345	Keynote-3 / Pratt & Whitney							
1345-1445	Keynote-4 / Airbus							
1445-1515								
Break								
Technical Session-1 (66 Papers)								
	Compressors	Problems of fluid and gas dynamics	New developments in gas turbine engines	Hypersonic Vehicle Propulsion	Combustion, fuels, injection and ignition	Noise pollution	Virtual development and testing	Heat transfer
1515-1545	Investigation on aerodynamic performance of liner compressor cascade with tubercle leading edge blade - ISABE-2017-21330	Investigations on the Leakage Flow Characteristics of the Brush Seal with Annular Pressure Reducing Groove - ISABE-2017-21331	QUIET POWERPLANT CONCEPT WITH ADAPTIVE FAN VARIABLE CYCLE ENGINE FOR FUTURE SUPERSONIC COMMERCIAL AIRCRAFT - ISABE-2017-21319	Study on Overall Performance Design of Hypersonic Precooled Combined Cycle Engine with Parallel Heat Release and Compression System - ISABE-2017-21335	Fuel profiles and operative pressure's influence on the NOx emissions in a premixed flame - ISABE-2017-21354	Turbine Tone Noise Reduction via Optimized Acoustic Coupling - ISABE-2017-21368	Data Re-use for Preliminary Thermal-Mechanical Design of Gas Turbine Engines - ISABE-2017-21389	Infrared Signature of Serpentine Nozzle with Different Aspect Ratio - ISABE-2017-21357
1545-1615	LES Investigation of Wake Development in a Transonic Fan Stage for Aeroacoustic Analysis - ISABE-2017-21348	Computational Study on Pseudo-Shock Wave in a Rectangular Duct - ISABE-2017-21344	PROGRESS IN DEVELOPING ULTRA-HIGH PRESSURE RATIO CORE-ENGINE TECHNOLOGIES - ISABE-2017-21339	German Scramjet Technology Development: From the early steps to the current status - ISABE-2017-21367	Flame Transfer Function of Fuel-air Nozzle Characteristics in a Model Gas Turbine Combustor - ISABE-2017-22509	Effects of fan design parameters and CFD conditions on fan noise and aerodynamic performance - ISABE-2017-22509	Higher Fidelity Gas Turbine Thermal Performance Modelling - ISABE-2017-21475	Experimental Set up and Characterization of Air-Oil Heat Exchangers in Oil Systems for Aero Engines - ISABE-2017-21373
1615-1845	Flow structure driven end-wall contouring for a highly loaded axial compressor - ISABE-2017-21351	Investigation of the Boundary Layer Development at the Corner of the Special-Shaped Expansion Pipe - ISABE-2017-21352	A variable pitch fan and ultrahigh bypass ratio turbofans. A conceptual evaluation - ISABE-2017-21355	Flow Properties of SHSI Fuel Supplied from Porous Square Injector - ISABE-2017-21414	LBO Predictions of Aero-engine Combustors Based on Improved Semi-empirical Correlations under Off-design Operations - ISABE-2017-21361	Wall-Resolved Large Eddy Simulation for Aeroengine Aeroacoustic investigation - ISABE-2017-22515	PERFORMANCE MODELLING OF AN ULTRA-HIGH BYPASS RATIO GEARED TURBOFAN - ISABE-2017-22512	The influence of descent and taxi profiles on the thermal state of a jet engine at shutdown - ISABE-2017-21429
1645-1715	Turbo-compressor Aerodynamic Test at a Turbine Altitude Test Facility - ISABE-2017-21362	Turbulent flow development inside a rotating two - ISABE-2017-21382	Test bench development for experimental characterisation of oil-air two-phase flow for breather in modern aero engine oil system - ISABE-2017-21377	Testing of a Ducted Rocket with a Paraffin/Oxygen Hybrid Gas Generator - ISABE-2017-21424	Experience in development of a combustion chamber for a small gas turbine engine - ISABE-2017-21437	Advanced Noise Abatement Procedures for a Supersonic Business Jet - ISABE-2017-22538	Efficient uncertainty quantification for an axial compressor using adaptive multi-fidelity kriging - ISABE-2017-22543	FLOW and HEAT TRANSFER COMPUTATIONS OF RIB-ROUGHENED and SERPENTINE COOLING CHANNELS WITH RANS and SCALE RESOLVING SIMULATION MODELS - ISABE-2017-21460
1715-1745	Numerical prediction of centrifugal compressor surge limit - ISABE-2017-21369	Influence of Combustor Swirl on Turbulence at the Large Scale Turbine Rig (LSTR) - ISABE-2017-21393	Numerical Calculation of Internal Blade Cooling Using Porous Ribs - ISABE-2017-21383	Tunable Diode Laser Absorption Spectroscopy (TDLAS) technique for simultaneous measurements of temperature, velocity, and H2O in high enthalpy hypersonic wind tunnel - ISABE-2017-21442	Numerical Study of Fuel Atomization and Vaporization in a Micro Turbjet Vaporizer Tube - ISABE-2017-21418	Noise of Small Turbopump Engine DGEN80 - ISABE-2017-22545	Cycle analysis of conventional and advanced airbreathing engines involving real gas and condensed phase effects - ISABE-2017-22558	Heat transfer coefficient on air-contact surfaces of an airfoil heat exchanger - ISABE-2017-21468
1745-1815	Numerical and Experimental Studies on Variable Geometry and Variable Camber Inlet Guide Vane in Low Speed Axial Compressor - ISABE-2017-21397	Smoothed Particle Hydrodynamics: An Application to Oil Distribution Systems - ISABE-2017-21457	Performance Analysis of an Aero Engine with Interstage Turbine Burner - ISABE-2017-21386	Mach 4 Experiment of Hypersonic Pre-cooled Turbopump Engine - ISABE-2017-22532	Experimental Investigation on Laser-induced Plasma Ignition of Hydrocarbon Fuel in Scramjet Engine at Takeover Flight Conditions - ISABE-2017-21427	Assessment of Civil Aircraft System-Level Noise During Landing Take-off Cycle - ISABE-2017-22587	A Fast and Robust Automated 3D Design Environment for Turbomachinery Using GPUs - ISABE-2017-22586	Numerical Investigations on Sealing Performance of the New -designed Sinusoidal Honeycomb Radial Rim Seal - ISABE-2017-21480
1815-1845	Design Optimisation of a Highly Loaded -2.5 Stage Low Pressure Compressor - ISABE-2017-21399	PARAMETRIC STUDIES OF GROUND VORTICES INDUCED BY ENGINES INLETS AND PROPELLERS NEAR THE GROUND - ISABE-2017-21488	INVESTIGATION OF A CIRCUMFERENTIALLY RETRACTABLE SHIELDING CONCEPT FOR CROX ENGINES WITH EMPHASIS ON THE ACOUSTIC SIGNATURE - ISABE-2017-21449	Fluidic Thrust Vectoring on a Scramjet Nozzle - ISABE-2017-22546	Main aspects of kerosene and gaseous fuel ignition in aero engine - ISABE-2017-21462	Propulsion Noise Reduction Research in the NASA Advanced Air Transport Technology Project - ISABE-2017-22697	Turbomatch - Webengine - A Web based Gas Turbine Engine Performance Analysis Tool - ISABE-2017-22617	Development of preliminary design tool for heat exchanger - ISABE-2017-22615
1900-2230	ISABE Welcome Buffet							

ISABE-2017 Tuesday, 05 Sep 2017

	Auditorium	Exchange-1	Exchange-2	Exchange-3	Exchange-4	Exchange-5	Exchange-6	Exchange-7
0800-0900	Keynote-5 / CleanSky							
0900-1000	Keynote-6 / ITP							
Break								
Technical Session-2 (40 Papers)								
	Compressors	Problems of fluid and gas dynamics	New developments in gas turbine engines	Hypersonic Vehicle Propulsion	Fuels, injection and ignition	Materials, structures and structural failure	Integrated systems	Heat transfer
1030-1100	Numerical Investigation of the Impact on Fan Aerodynamics of a Distorted Inlet Total Pressure Profile - ISABE-2017-21408	Numerical Simulation of Air-oil Separator with Metal Foam in Aero-engine - ISABE-2017-21396	Comparative Assessment and Parameter Variation Area Fan Nozzle Concepts at Inlet and Outer By-Pass Duct Surfaces - ISABE-2017-21342	Numerical simulation on gas-liquid two phases flow of fuel supply system of scramjet engine - ISABE-2017-21380	Pollutant Emissions and Performance of Algae-based alternative fuel blends in a Gas Turbine Combustor - ISABE-2017-21489	Experimental characterization of carbon fiber brush seals leakage performance in function of the geometrical parameters under dry conditions - ISABE-2017-21343	Effect of Inlet Flow Distortion on Installed Gas Turbine Performance - ISABE-2017-21336	The numerical simulation and experimental study on aero-engine bearing cavity wall heat transfer - ISABE-2017-21379
1100-1130	Evaluating Effects of Rotor Tip Clearance on Downstream Stator Performance in a Multistage Compressor - ISABE-2017-21409	Revisiting an Asymptotic Formula for the Mixing Loss in Turbomachinery Flow Simulations - ISABE-2017-21402	Experience of usage ISO certification technology for air engine - ISABE-2017-21378	EXPERIMENTAL INVESTIGATIONS OF A SCRAMJET DEMONSTRATOR ENGINE - WIND TUNNEL TESTS - ISABE-2017-21413	Operating characteristics and efficiency improvement potential for very small jet engines - ISABE-2017-22559	MODELLING APPROACH FOR CALCULATION OF LEADING EDGE DETERIORATION OF FAN BLADES DUE TO EROSION - ISABE-2017-21385	Off-Design Performance of a Streamline-Traced External-Compression Supersonic Inlet - ISABE-2017-21390	Comparison of RANS and LES on Gas Turbine Combustor Liner Temperature using Conjugate Heat Transfer (CHT) Methodology - ISABE-2017-22570
1130-1200	Detached-Eddy Simulation of tip leakage flow on a transonic rotor - ISABE-2017-21410	SAS-SST model simulation of the flow and heat transfer inside square ribbed duct with rotation - ISABE-2017-21412	SIMPLIFIED DYNAMIC SIMULATION OF GAS TURBINE SOFC HYBRID SYSTEM - ISABE-2017-21454	Aerodynamic Characterizations on Supersonic Base Flow Forming at Downstream from Scramjet External Nozzle - ISABE-2017-21425	SUMMARY OF CFD-LED DESIGNS OF A FILMING INJECTOR FOR N+3 GAS-TURBINE COMBUSTORS - ISABE-2017-22607	Turbine Entrance Temperature effect on particle deposition on the vane of an high pressure turbine - ISABE-2017-22514	A DESIGN APPROACH FOR A COUPLED ACTUATOR SYSTEM FOR VARIABLE NOZZLES AND THRUST REVERSER OF AERO ENGINES - ISABE-2017-21450	Heat Transfer Measurements in a Squared Ribbed Channel: Evaluation of Turbulent Heat Transfer Models - ISABE-2017-22574
1200-1230	The impact of high-order numerical schemes on flow separation capturing of a linear compressor cascade using DDES method - ISABE-2017-21416	Numerical and Experimental Studies of Reynolds Number and Rotor-Stator Clocking Effect on Performance of a Highly-loaded Two-stage Compressor with 3.7 Total Pressure Ratio - ISABE-2017-21455	A Multi-Fuel Sequential Combustion System for Next Generation Low Emission Aircraft Engines - ISABE-2017-21486	Study on Flame Stabilization in a Kerosene fueled Scramjet Combustor with Air Throttling in a Pulse Combustion Wind Tunnel - ISABE-2017-21447	Main aspects of kerosene and gaseous fuel ignition in aero engine - ISABE-2017-22669	Challenges and Opportunities of Thermomechanical FEM Simulations of High Fidelity Aero-Engine Models by Implicit Time-Integration - ISABE-2017-22524	Liquid Hydrogen Fuel for a Blended Wing Body Aircraft: Case Study on the N3-X - ISABE-2017-21470	Numerical Study of Uneven Wall Heating Effect for a One Side Rib-Roughened Channel Under Rotation - ISABE-2017-22591
1230-1300		CFD analysis of integrated compressor duct aerodynamics - ISABE-2017-22619	Sensitivity Analysis of a Triple Bypass Adaptive Cycle Engine Concept - ISABE-2017-21491	EXPERIMENTAL AND COMPUTATIONAL INVESTIGATIONS OVER A LIQUID FUEL RAMJET COMBUSTOR - ISABE-2017-22534	Influence of Primary Spray Characteristics on the Atomization Performance with a Double-stage Swirler - ISABE-2017-22683	Microstructure dependent material models: Application to wrought 718 alloy - ISABE-2017-22551	Establishing viable fault management strategies for distributed electrical propulsion aircraft - ISABE-2017-22523	Compact Heat Exchanger Design and Analysis for High Temperature and High Pressure in Gas Turbine Engine - ISABE-2017-22612
1300-1345								
1345-1445	Keynote-7 / Emsysjet							
1445-1545	Keynote-8 / CAECC							
Break								
Technical Session-3 (40 Papers)								
	Compressors	Problems of fluid and gas dynamics	Diagnostics	Hypersonic Vehicle Propulsion	Combustion	Materials, structures and structural failure	Integrated systems	Heat transfer
1615-1645	Application of shear-sensitive liquid crystal coating on flow visualization of compressor cascade - ISABE-2017-21415	Research on the Effects of Vertex Generator on the Secondary Cross Flow at the Cascade Channel - ISABE-2017-21350	Diagnostics of Gas Turbine Systems Using Gas Path Analysis and Rotordynamic Response Approach - ISABE-2017-21406	A DRBC Propulsion System - ISABE-2017-21421	Development and testing of a High flexibility MGT combustor for lignocellulosic pyrolysis oil - ISABE-2017-21364	Erosion failure mechanisms of TiAlN coating systems under a single particle impact event - ISABE-2017-22507	A pre-design sensitivity analysis tool for electrical power systems on future hybrid-electric aircraft - ISABE-2017-21353	Experimental investigation on onset of instability of supercritical kerosene flowing in mini-tubes - ISABE-2017-21496
1645-1715	Accounting for Impeller Exit Flow Unsteadiness in the Diffuser Design Process of an Aero-Engine Centrifugal Compressor - ISABE-2017-21417	Application of Extreme Value Statistics to Reduce Test and Computational Requirements for Quantifying Maximum Engine Inlet Total Pressure Distortion - ISABE-2017-21419	PERFORMANCE MODEL ZOOMING FOR FOULING ASSESSMENT AND MONITORING - ISABE-2017-22567	Numerical investigation of heat flux on HIMICO with ablative TPS	ISOLATOR FLOW RESPONSE TO SCRAMJET-RAMJET MODE TRANSITION IN A SCRAMJET ENGINE - ISABE-2017-21366	Experimental Investigation of the Onset of Sand Deposits on Hastelloy-X between 1000 A°C and 1100 A°C - ISABE-2017-22608	Turbo-electric Vehicle Study - A techno-economic and environmental risk assessment of the N3-X - ISABE-2017-22535	Experimental investigation on heat transfer of kerosene flowing in tiny horizontal rectangular tubes at supercritical pressures under gravity - ISABE-2017-21497
1715-1745	The Surge Margin of an Axial Compressor: Estimations from Steady State Simulations - ISABE-2017-21422	EXPERIMENTAL INVESTIGATION OF INFRARED SIGNAL CHARACTERISTICS IN A MICRO TURBOJET ENGINE - ISABE-2017-21422	Experimental Evaluation of fs-IR FBG Sensors for Application in Gas Turbines Temperature Measurement - ISABE-2017-22638	Improved availability for hydrogen fuelled scramjets with pre-injection catalytic radical farming - ISABE-2017-22505	Flow Characteristics of an RQL-TVc quenched by an orifice plate combined with guiding bluff-body - ISABE-2017-21374	Implicit FEM Simulation of High Fidelity Aero-Engine Models - ISABE-2017-22622	Integrated Turbo Electric Distributed Propulsion/Flap blowing for Blended Wing Body Aircraft - ISABE-2017-22668	A Generic Approach for Assessing the Heat Transfer in Highly Loaded Gears for Jet Engine Gearboxes - ISABE-2017-22593
1745-1815	Effects of Flow Control onto the Stall and Surge Phenomena of a Centrifugal Compressor - ISABE-2017-21481	An evaluation of depth-averaged thin film models for falling wavy liquid film conditions - ISABE-2017-21465	Integrated Gas Turbine System Diagnostics: Components and Sensor Faults Quantification using Artificial Neural Network - ISABE-2017-22650	Research on Quantitative Evaluation Method of Scramjet and Integration - ISABE-2017-22598	Ways for expansion of the boundaries of the combustion chamber: stable operation and the effect caused on them by the fuel mixture type - ISABE-2017-21438	Effect of Surface Treatments on Microstructure, Thermal Cycling Life and Failure Mechanism of Thermal Barrier Coatings - ISABE-2017-22670	Turbocharger Development For A High Altitude Observation Aircraft - ISABE-2017-22673	Preliminary Design Optimisation of Surface Air/Oil Coolers Used on Geared Turbopump Engines - ISABE-2017-22600
1815-1845	Investigation of Variable Inlet Guide Vanes on a Low Speed Compressor Stage with a Cantilevered Stator - ISABE-2017-21492	Vortex Shedding from a Central injector in a Compressible Accelerated Nozzle Flow - ISABE-2017-21472	Diagnosis And Isolation For Multiple Gas Path Performance Degradations Of Turbofan Based On A Bank Of Unknown Input Observers - ISABE-2017-22676	Design Optimisation of Combustor and Nozzle Configuration for Quasi-Axisymmetric Scramjets - ISABE-2017-21610	Comparative Performance Study of CFD Species Models for Hydrogen Micromix Combustion - ISABE-2017-21479	Assessment Of Propeller Blade Erosion - ISABE-2017-22695	Vibration Testing & Validation Of Aero Engines Pipe Work - ISABE-2017-22685	Computational Modelling of the Flow and Heat Transfer in Dimpled Channels - ISABE-2017-22649
1900-2230	ISABE Board and Invited Speakers Dinner at the Midland Hotel (by invitation)							

ISABE 2017 Wednesday, 06 September 2017

	Auditorium	Exchange-1	Exchange-2	Exchange-3	Exchange-4	Exchange-5	Exchange-6	Exchange-7	
0800-0900	Keynote-9 / Honeywell								
0900-1000	Keynote-10 / HAL								
Break									
Technical Session-4 (40 Papers)									
	Compressors	Problems of fluid and gas dynamics	Diagnostics	Advanced Aero Engine Research and Assessments 1	Combustion	Materials, structures and structural failure	Manufacturing processes	Turbines	
1030-1100	Global Three - Dimensional Surrogate Modelling of Gas Compressor Aerodynamic Performance - ISABE-2017-22648 Through-Flow and Blade-to-Blade Analysis of Sweep and Lean-Induced Shock Wave Impact in Transonic Axial-Flow Compressors - ISABE-2017-22651	The Separated-Flow Transition Mechanism under Low-Pressure Turbine Conditions - ISABE-2017-21370 Rainbow Schlieren Visualization of Shock Trains in Rectangular Ducts - ISABE-2017-21452	Impact of Reactive Sands on Engine Degradation - ISABE-2017-22655 DIAGNOSTICS OF POWER SETTING SENSOR FAILURE OF GAS TURBINE ENGINES USING GENETIC ALGORITHM - ISABE-2017-21333	Advanced Aero Engine Research and Assessments 1 (Intro) Clean Sky Research and Demonstration Programmes for Next Generation Aircraft Engines - ISABE-2017-22644	Combustion Instability Characteristics in a Dump Combustor Using Different Hydrocarbon Fuels - ISABE-2017-21433 DEVELOPMENT OF FRONT MODULE FOR GTE COMBUSTOR WITH LOW NOx EMISSION - ISABE-2017-21439	Analysis of an auxetic casing structure for tip clearance control under various temperature and pressure conditions - ISABE-2017-22629 Fretting wear modeling of misaligned spline coupling in aero-engine accessory - ISABE-2017-22681	Additive Manufacturing of a Compressor Vane with Multi-Hole Pressure Probes - ISABE-2017-22529 PREDICTIVE MODEL OF FORCES FOR INCONEL 718 FIR TREE BROADCHING - ISABE-2017-22656	Numerical Simulation of ITD Flows in the Presence of HP Blade and LP Vane - ISABE-2017-21340 Rotating turbine frame experience from SAGE2 - ISABE-2017-21474	
1100-1130		Optimization of An Axial Turbine Used in a Small Gas Turbine Engine Based on 3D Simulations - ISABE-2017-21500	A Novel Approach for Optimal Measurement Selection Using Genetic Algorithm for Gas Path Diagnostics - ISABE-2017-21359	Vision 20 - Rolls-Royce's long term civil aircraft propulsion system concept and technology strategy - ISABE-2017-22531	Gas Turbine Combustor Modeling with and without Nozzle Guided Vanes - - - Phase II - ISABE-2017-21482	Kinetics and mechanism of chemical reaction at the unidirectional continuous SiC fibre/C/11-17 composite - ISABE-2017-22686	Effect of Shot Peening Processing on the Bending Deformation of High Strength Aluminum Alloy - ISABE-2017-22548	Modeling and performance analysis of vaneless counter rotating turbine in gas turbine engines - ISABE-2017-21476	
1130-1200	SECONDARY FLOW PHENOMENA IN THE RETURN CHANNEL OF A CENTRIFUGAL COMPRESSOR - ISABE-2017-22658								
1200-1230	Identification and Rapid Detection of Rotating Stall via Deterministic Learning - ISABE-2017-22682 Numerical Investigation on Rotating Instability from the oscillation of tip leakage flow in transonic axial compressor rotor - ISABE-2017-22689	Aerodynamic Investigation of S-Duct Intake for High Power Turbo Prop Installed on a Channel Wing - ISABE-2017-22540	Remote Operation and Monitoring of a Micro Aero Gas Turbine - ISABE-2017-22589	Selecting Combinations of Advanced Aero Engine Technologies - ISABE-2017-22660	Lean Direct Injection Combustor Development at NASA Glenn Research Center - ISABE-2017-21483	Study on Design and Analysis of Light Weight Composite Propeller Blade of A Regional Turbo Prop Aircraft Considering Impact Damage - ISABE-2017-22698	Thermo Mechanical Fatigue Life of Turbine Rotor for Small Gas Turbine Engine - A Reliability Approach - ISABE-2017-22701	Microstructure-based computational modelling of ring-rolled Inconel718 superalloy - ISABE-2017-22563	A REVIEW OF NON-AXISYMMETRIC ENDWALL CONTOURING IN A MODEL ROTATING TURBINE AT ON AND OFF-DESIGN SPEEDS AND A COMPARISON TO CASCADE DATA - ISABE-2017-21480 Efficiency Losses Resulting from Base Pressure Deficit and Energy Separation over the Speed Range - ISABE-2017-22539
1230-1300		Fundamental Ratios Required for Successful Fluid Curtain Sealing - ISABE-2017-22588	Compressor fouling influence on high frequency data signals - ISABE-2017-22699	Integrated Assessment of Vehicle Architecture Tradeoffs for Variable Pitch Geared Fan Engine - ISABE-2017-22605	Gas Turbine Combustion Using Low Swirl Injection - ISABE-2017-22517		Deposition of Exhaust Nano-particles in the presence of Electric Field with Applications in Air Breathing Engines - ISABE-2017-22671		
Lunch									
1345-1445	Keynote-11 / General Electric								
1445-1545	Keynote-12 / MTU								
1530-1630									
1930-2230									
Conference Visits ISABE Industry Dinner- Hosted by Rolls-Royce-Venue TBD									

ISABE 2017 Thursday, 07 September 2017

	Auditorium	Exchange-1	Exchange-2	Exchange-3	Exchange-4	Exchange-5	Exchange-6	Exchange-7
0800-0900	Keynote-13 / AIRC-CU							
0900-1000	Keynote-14 / Lufthansa							
1000-1030								
Break								
Technical Session-5 (32 Papers)								
	Micro and small engines	Problems of fluid and gas dynamics	New developments in gas turbine engines	Advanced Aero Engine Research and Assessments 2	Integrated testing prediction and evaluation	Engine Safety	Intelligent engine control and health monitoring	Turbines
1030-1100	Investigation of the Performances of a Regenerative Combustion Chamber for Ultra-Micro Gas Turbines - ISABE-2017-21420	Experimental Results of Shock Trains in the Thermal Ablation C-SiC Composite Isolator - ISABE-2017-21388	ENOVAL - Low Pressure System Technologies for Ultra High Bypass Ratio Engines - ISABE-2017-21392	Multidisciplinary design optimization of a counter rotating fan under high level of restrictions - ISABE-2017-21387	A WHOLE ENGINE OPTIMIZATION BASED ON MEDIAL OBJECT TRANSFORMATIONS - ISABE-2017-21441	Turbine thermomechanical modelling during excessive axial movement and overspeed - ISABE-2017-21440	Application of ROMs to Aeroengines Health Monitoring - ISABE-2017-21346	Investigations on Internal Flow Behavior in a Mixed-Flow Turbine with Partial Rotation Guide Vanes - ISABE-2017-21349
1100-1130	Experimental Investigation of Inflow Condition Effects on Tesla Turbine Performance - ISABE-2017-22554	Comparison of Turbulence Modeling on the Secondary Flow in the Linear T105 Cascade at High Altitude Condition - ISABE-2017-22555	NUMERICAL AND EXPERIMENTAL INVESTIGATION OF VARIABLE-AREA EJECTOR JET NOZZLE AERODYNAMICS - ISABE-2017-21453	Aerodynamic Installation of Ultra High Bypass Ratio engines - ISABE-2017-22592	Development and validation of a gas turbine dynamic performance model - ISABE-2017-22501	Enhanced Experimental Measurements of a Gas Turbine Compressor Rotor Analogue Undergoing Thermal Bow - ISABE-2017-21485	Gas Path Diagnostics Using Fuzzy Pattern Recognition in Gas Turbine Engines - ISABE-2017-21404	Design and commissioning of a rotating turbine rig for cavity flows investigation - ISABE-2017-21499
1130-1200	Design of a Cross-over Diffuser for a Mixed-Flow Compressor - ISABE-2017-22573	Geometric and Flow Condition Factors in Shallow Sump Variants - ISABE-2017-22557	Assessment of the Fan Simulation for quantifying the Boundary Layer Ingestion benefits on an Experimental Propulsion System - ISABE-2017-22536	Design Optimization of Separate-Jet Exhausts for the Next Generation of Civil Aero-Engines - ISABE-2017-21407	Real Time Thrust Estimation and Display for Ski-Jump Takeoff of Fighter Aircraft	Aerodynamic Performance of an Unlocated High Pressure Turbine Rotor - ISABE-2017-21494	Nonlinear model-based adaptation for off-design performance prediction of gas turbines - ISABE-2017-21436	Variability in High-pressure Blade Trailing Edge Geometry and its Impact on Stage Capacity and Blade Temperatures - ISABE-2017-22576 ON THE VALIDATION OF TURBULENCE AND TRANSITION MODELS IN A NONLINEAR FREQUENCY DOMAIN METHOD USING A LOW PRESSURE TURBINE - ISABE-2017-22582
1200-1230	Evaluation of a hybrid fuel-cell based propulsion system with a hardware-in-the-loop flight simulator - ISABE-2017-22611	Influence of Active Flow Control on different kinds of Separation Bubbles - ISABE-2017-22572	The effect of a hub fillet radius on a non-axisymmetric endwall contour - ISABE-2017-22583	Numerical Studies to Improve Performance of Mail-Slot Nacelle for N3-X Hybrid Wing-Body - ISABE-2017-22597	DESIGN AND MANUFACTURE OF A TURBINE EXHAUST CASE FOR AERODYNAMIC AND AEROACOUSTIC TESTING - ISABE-2017-22571	Dynamic model and vibration characteristics analysis of the aero-engine rotor system with fan blade-out - ISABE-2017-22566	STUDY FOR THE EFFECT OF INLET FLOW DISTORTION ON A CONTROL EFFICIENCY OF TURBOFAN - ISABE-2017-22578	
Lunch								
1230-1315	Keynote-15 / NASA							
1315-1415	Keynote-16 / ICAS							
1415-1515								
1515-1545								
Break								
Technical Session-6 (40 Papers)								
	Combined cycle engines	Problems of fluid and gas dynamics	New developments in gas turbine engines	Hypersonic Vehicle Propulsion	Combustion	Aeromechanics, flutter vibration	Virtual development and testing	Turbines, cooling technologies
1545-1615	Potential of the bottom Organic Rankine Cycle to recover energy on various aircraft engine architectures - ISABE-2017-21345	Numerical Study on the Aerated-Spray Jets in Supersonic Crossflow Based on a Two-Fluid Model - ISABE-2017-21423	Staged dual-fuel gasturbine combustion system - ISABE-2017-21401	Experimental investigation on fuel distribution using kerosene - PLIF in a scramjet combustor with dual cavity - ISABE-2017-21426	The design testing and application of a can-type combustor in a compressor test rig - ISABE-2017-22522	Blade Vibration in a High-Speed Centrifugal Compressor with an APU-Style Inlet - ISABE-2017-21398	Combustor Design Optimization Using the Prometheus Design System - ISABE-2017-21394	Influence of asymmetric vanes on the rotor blades' vibration stress of a transonic turbine based on fluid and structure coupling study - ISABE-2017-21372
1615-1645	Design and Experimental Study of a 3D Over-Under TBCC Exhaust System - ISABE-2017-21376	Mixing Losses in Steady And Unsteady Simulations Of Turbomachinery Flows - ISABE-2017-21473	The Brayton Cycle and Entropy Nature at the Space Thermostat Presence - ISABE-2017-22506	Analysis of Steady State Characteristics of Scramjet Engines - ISABE-2017-21430	Coarse and Fine Atomization Regimes in Miniature Airblast Atomizer - ISABE-2017-22525	HARMONICS OF FORCES ACTING ON HPC ROTOR BLADES DUE TO ROTATING STALLS - ISABE-2017-21477	Multi-fidelity efficient global optimisation of the geometry of a transonic axial compressor - ISABE-2017-22544	The Design and Modelling of an Inward-Flow Radial (IFR) Turbine Stage - ISABE-2017-22602
1645-1715	A gas turbine turboshaft engine incorporating a Rankine bottoming cycle for commercial aircraft propulsion	LES of Breakup and Atomization of a Liquid Jet into Cross Turbulent Flows using Stochastic Modeling - ISABE-2017-22621	THE ROLLS-ROYCE ULTRAFAN(TW) PROJECT - DELIVERING THE NEXT GENERATION OF GAS TURBINE - ISABE-2017-22511	The HIFIRE 7 Flight Experiment - High Altitude Scramjet Inlet Performance - ISABE-2017-21501	Research of Solid Propellant Burning Processes in Low Temperature Aeroengine Gas Generators - ISABE-2017-22564	Aerodynamic Damping of a High Pressure Compressor Rotor During Surge - ISABE-2017-22562	"Virtual Engine" Approach for the Coupled Analysis of an Engine Framework and Rotors - ISABE-2017-22645	A Strategy to Implement Optimization Techniques in the Preliminary HPT Design Phase - ISABE-2017-22604
1715-1745	TEST OF A ROCKET-BASED COMBINED CYCLE ENGINE MODEL AT EJECTOR, ROCKET, RAMJET AND SCRAMJET MODES - ISABE-2017-21502	A Coupled Euler-Lagrange CFD Modelling of Droplets-to-Film - ISABE-2017-22628	On the way to Open Rotor aircraft - ISABE-2017-22580	Investigation of the starting phenomena in an inward turning air intake - ISABE-2017-22603	Gaseous Emissions Results from a Three-Cup Flame Tube Test of a Third-Generation Swirl-Venturi Lean Direct Injection Combustion Concept - ISABE-2017-22606	Experimental Research on Rotor-bearing System Vibration Features Caused by Aero-engine Bearing Assembly Parameters - ISABE-2017-22679	Flow-Field and Conjugate Heat Transfer of a Technology Development Platform for Advanced Combustion Systems - ISABE-2017-22672	Effect of Rim Seal Purge Flow on the Aerodynamic Performance of Turbine Stage and Cooling Effectiveness of Rotor Blade Endwall Part I: Coolant Flow Rate - ISABE-2017-21337
1815-1845	Analytical and Experimental Analysis of Waste Heat Recovery Boosted Turboshaft for Land and Marine Applications - ISABE-2017-22639	Experimental Calibration of a High Speed Blowdown Tunnel - ISABE-2017-22636	Design and Optimisation of an Advanced Civil Air Transport Aircraft - ISABE-2017-22585	Sea Level Static Tests of Gas Generator Cycle Air Turbo Ramjet Engine for Supersonic UAV - ISABE-2017-22623	Generic Post-Stall Combustion Model - ISABE-2017-22646	Study on rotor dynamics characteristics of gas turbine rotor-bearing seal system - ISABE-2017-22694	Multidisciplinary design optimization of commercial aero-engine system - ISABE-2017-22688	Effect of Rim Seal Purge Flow on the Aerodynamic Performance of Turbine Stage and Cooling Effectiveness of Rotor Blade Endwall Part II: Inlet Preswirl - ISABE-2017-21338
1900-2230								
ISABE Banquet-Exchange Hall								

ISABE 2017 Friday, 08 September 2017

	Auditorium	Exchange-1	Exchange-2	Exchange-3	Exchange-4	Exchange-5	Exchange-6	Exchange-7
0800-0900	Keynote-17 / Boeing							
0900-1000	Keynote-18 / Safran							
1000-1030	Break							
Technical Session-7(40 Papers)								
	Combined cycle engines	Cost and business	New developments in gas turbine engines	Chemical pollution, pulsed and other detonation engines	Combustion	Aeromechanics, flutter vibration	Virtual development and testing	Cooling technologies
1030-1100	Preliminary Study on Turbine Based Combined Cycle Propulsion System Performance - ISABE-2017-21360	Novel engine like test methods for the development of ultra -high ratio compressor components - ISABE-2017-21463	Advance2 - Rolls -Royce Technology for a new corporate jet engine family - ISABE-2017-21403	A Case Study on Contrail Avoidance: Effects of collection of condensed water from engine core exhaust on aircraft performance - ISABE-2017-21471	Fuel Vaporization in Small Jet Engine's Vaporizers - ISABE-2017-22526	Study on rotor dynamics characteristics of gas turbine rotor - bearing -seal system - ISABE-2017-22541	A Multi -fidelity Fuel Spray Nozzle Design System - ISABE-2017-21395	Aerodynamic Design of a Cooled Cooling Air System for an Aero Gas Turbine - ISABE-2017-21302
1100-1130	Application of Response Surface Modelling Methods for the Design Space Exploration of Combined Gas -Steam Cycle Power Plants - ISABE-2017-21456	Technoeconomic Evaluation of an Aircraft Engine Upgrade: Part 1 - Aircraft Performance Outcomes - ISABE-2017-22504	Oil -free engine development - ISABE-2017-22552	Prediction of NOx Emissions for DAC and RQL Combustors Using the Stirred -Reactor Approach - ISABE-2017-22599	Simulated Altitude Testing of Replacement Fuels for Aviation Piston Engines - ISABE-2017-22609	Fluid -Structure Interaction Modelling for High Cycle Fatigue Life Investigation of Gas Turbine Blades - ISABE-2017-22542	Development of a Modular and Scalable Simulation Platform for Design Optimization and Performance Analysis of Gas Turbines and Power Plants - ISABE-2017-22674	Effect of varying hole diameters in streamwise direction on jet impingement heat transfer under maximum crossflow condition - ISABE-2017-21405
1130-1200	Numerical simulation of a novel rotary engine compared to conventional reciprocating engine cycle - ISABE-2017-22503	Technoeconomic Evaluation of an Aircraft Engine Upgrade: Part 2 - Technoeconomic Analysis - ISABE-2017-22528	CONTRAIL-FREE AERO-ENGINES - ISABE-2017-22561	Evaluating the effect of sample line length on NOx emissions - ISABE-2017-22627	Air Swirler Configuration Effects on Flow Structure, Combustion, and Emissions Performance using a 7 -point Lean Direct Injector Array - ISABE-2017-22620	Model Update and Validation of a Mistuned High Pressure Compressor Test Blisk - ISABE-2017-22568	Application of Sub -Modeling Technique for Whole Engine Transient Dynamic Analysis - ISABE-2017-22675	Numerical simulation on effect of ingress for Counter -rotating turbine Discs - ISABE-2017-21446
1200-1230	Design and Performance Prediction of the Rocket -Based Combined Cycle engine at the Ejector -Rocket Mode - ISABE-2017-22519	Flow Visualization of Jet Test Using Background Oriented Schlieren in Altitude Test Facility - ISABE-2017-22530	Conceptual Design of a Turbofan Engine for a Supersonic Business Jet - ISABE-2017-22635	Performance Analysis of Continuous Rotating Detonation Aero -turbine Engine - ISABE-2017-21431	Supersonic Combustion Behaviors for Mixtures of Methane and Ethylene in a Scramjet Model Combustor - ISABE-2017-22630	Experimental Analysis of Mistuned Forced Response in an Axial High Pressure Compressor Rig With Focus on Tyler - Sofrin Modes - ISABE-2017-22614	Linking Propulsive and Aerodynamic Effects at the Conceptual Design Level - ISABE-2017-22700	Numerical Investigation of Film Cooling Holes Schemes Applied in Gas Turbine Blade - ISABE-2017-22513
1230-1300	Dual -Mode Free -jet Combustor - ISABE-2017-22537	Flow Conditioning of Subsonic and Supersonic Blowdown wind tunnels - ISABE-2017-22632	Optimisation of an aircraft Fluid Heat Management using Exergy analysis method - ISABE-2017-22657	CFD assessment of the plenum geometry for the Pulse Detonator Combustor (PDC) - ISABE-2017-22560	Comparison of Reduced & Detailed Reaction Mechanisms on Supersonic Hydrogen - Air Diffusion Flame - ISABE-2017-22633	Robust Design Method to Depress the Rotor's Vibration for Aircraft Turbofan Engines - ISABE-2017-22692	An enhanced hybrid component mode synthesis procedure for rotor dynamic analysis of turbo-fan engines - ISABE-2017-22556	Assessment of the effect of turbulent heat flux modelling on the mixing of hot streaks - ISABE-2017-22556
1300-1345	Lunch							
Technical Session-8 (16 Papers)								
	VTOL and STOVL	Cost and business	New developments in gas turbine engines	Pulsed and other detonation engines	Combustion	Intelligent engine control and health monitoring	Virtual development and testing	Cooling technologies
1345-1415	Investigation on a hybrid SVC nozzle and coupling performance estimation with aero-engine - ISABE-2017-21365	The application of co-simulation of aero engine and free jet test facility evaluation models - ISABE-2017-22616	Experimental Investigation of Split Power Offtake on a Twin -Spool More Electric Engine Demonstrator - ISABE-2017-22508	Operating Characteristics of gas turbine driven by pulse detonation toward self -sustained operation - ISABE-2017-22547	Preliminary Aerodynamic Design Methodology for Aero Engine Lean Direct Injection Combustors - ISABE-2017-22595	Prognostics of gas turbine compressor fouling - ISABE-2017-21400	Optimization of hollow impeller - ISABE-2017-22690	Considering the Effects of Turbine Blade Cooling on Engine Performance Estimation - ISABE-2017-22516
1415-1445	Optimization of an electrical UAV powertrain - ISABE-2017-22549	Control to capitalise on temporary unused jet engine margins - ISABE-2017-22684	Design conditions of an aft mounted fan with boundary layer ingestion - ISABE-2017-22642	Geometrical Parameters Influencing the Efficiency of a PDC -Axial Turbine Stage - ISABE-2017-22601	Flow field and conjugate heat transfer of a technology development platform for advanced combustion systems - ISABE-2017-22664	INVESTIGATION OF ARCHITECTURE AND CHARACTERISTICS OF OIL SYSTEM WITH ELECTRICALLY DRIVEN PUMPS FOR GAS TURBINE ENGINE - ISABE-2017-21484	Multi -Objective Optimization Of Thermal Cycles For Turboprop Engines - ISABE-2017-22693	A hybrid LES -RANS validation of effusion cooling array measurements under representative combustor conditions - ISABE-2017-22637
1445-1615	Panel Discussion							
1615-1645	Break							
1645-1730	Invite to ISABE-2019 by the Next Host Australia							