

COBEM 2025

Area: Fluid Mechanics

Chair: Gustavo dos Anjos

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	751	Compute Unified Architecture (CUDA) Applied to the Problem of Vortex-Temperature Interactions	Gabriel Ferraz Marcondes de Carvalho	PG4	CFD
Wednesday	14:00 - 15:30	2559	Simulation of Dam Break Wave Using 3D DES Modeling	Roberto Carlos Moro Filho	PG4	CFD
Wednesday	14:00 - 15:30	1472	Computational Fluid Dynamics Investigation for Swirling Flow of Natural Gas in a 3D Supersonic Nozzle	Victor Gomes Kessuane de Arruda	PG4	CFD
Wednesday	14:00 - 15:30	1968	Control of Vortex Shedding from a Slightly Rough Bluff Body under Forced Vibration and Numerical Simulation using a Lagrangian Discrete Vortex Method	Victor Hugo Gava Filho	PG4	CFD
Wednesday	14:00 - 15:30	435	Computational Fluid Dynamics Study of the Edibon Wind Test Bench for Flow Velocity Profiling	Pedro Luís Barger de Souza	PG4	CFD
Wednesday	14:00 - 15:30	2346	Poiseuille flow in a tube of rhombic cross section	Vinícius Coutinho da Silva	PG4	CFD

Chair: Marcelo Souza de Castro

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	1593	Influence of Flow Constriction On Calcium Carbonate Deposition	Paulo Henrique De Sousa Silva	PG6	Multi-phase
Wednesday	14:00 - 15:30	1642	Experimental Investigation of Erosion in Impinging Jet Systems on Coated Surfaces	Cristian Mauricio Potosi Rosero	PG6	Multi-phase
Wednesday	14:00 - 15:30	1591	Particle Dynamics and Erosive Wear in Solid-Liquid Slurry Flow through a T-Junction	Bernardo Siqueira	PG6	Multi-phase
Wednesday	14:00 - 15:30	2580	Experimental investigation of inorganic scaling in Autonomous Inflow Control Devices (AICD)	Mateus Duarte de Oliveira	PG6	Multi-phase
Wednesday	14:00 - 15:30	2104	INFLUENCE WALL SHEAR STRESS ON INORGANIC SCALING IN PIPELINES	José Guilherme de Freitas Peres	PG6	Multi-phase
Wednesday	14:00 - 15:30	1558	Experimental and Computational Modal Analysis of a Pipe for Multiphase Flow Testing	Gabriel Mariz Borges da Cruz	PG6	Multi-phase

Area: Materials and Manufacturing Engineering

Chair: Neri Volpato

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
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Wednesday	8:00 - 9:30	820	Plasma Transferred Arc Processing Assessment On Single Layer Deposits Of Two Ni Based Alloys For A Viability Analysis Of Functionally Graded Material	Arthur Liegel	CT Atos	Additive
Wednesday	8:00 - 9:30	2806	Manufacturing Of Parts Using Additive Manufacturing (3D Printing) To Be Used As Models For Obtaining Sand Molds For Recyclable Aluminum Casting	Gladson Willian Pereira Rodrigues	CT Atos	Additive
Wednesday	8:00 - 9:30	1949	Permeability And Compressive Strength Analysis In Additively Manufactured Ceramic Porous Media Using Variable-Bead Width Filling	Felipe Di Nisio	CT Atos	Additive
Wednesday	8:00 - 9:30	1183	Development Of A Slicing Post-Processing Algorithm For 3D Printing Using A 6-Axis Robotic Manipulator	Arthur Mendes M	CT Atos	Additive
Wednesday	8:00 - 9:30	1819	Study On The Influence Of Aisi 316L Powder Particle Size Distribution On The Porosity Of Laser-Ded Printed Parts	Vitória Luise Silva	CT Atos	Additive
Wednesday	8:00 - 9:30	187	In-Service Corrosion Of Steel Pipe Manufactured By Wire Arc Additive Manufacturing (Waam)	Lucas Lauriano da Silva	CT Atos	Additive

Chair: Leandro João da Silva

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	18	Development of an infrared sensor-based system for interlayer temperature control in CMT-based wire arc additive manufacturing	Daniel Galeazzi	CT Atos	Additive
Wednesday	14:00 - 15:30	519	Vat photopolymerization of 316L stainless steel: anisotropy analysis in metal additive manufacturing	Italo Leite de Camargo	CT Atos	Additive
Wednesday	14:00 - 15:30	2586	Microstructure and Properties of Niobium Multilayers with Ceramic Reinforcements Processed by PTA-DED	Eloisa Cardozo	CT Atos	Additive
Wednesday	14:00 - 15:30	57	Comparison of the machining of 17 4-PH steel manufactured by rolling and by the DED-LB/M technique.	Brenda Gouveia	CT Atos	Additive
Wednesday	14:00 - 15:30	386	Investigation Of Optimal Exposure Time For Different Photopolymer Resins For 3D Lcd Printing	Lorenzo Martinez	CT Atos	Additive

Chair: Giuseppe Pintaude

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	1511	Analysis of the Formability of DP800 and TRIP800 Steels in Stamping Processes	Vitor Bendlin	PG15	aterials Characterization
Wednesday	14:00 - 15:30	2019	Study of Cryogenic Deformation of an AA7050 Aerospace Aluminum Alloy	Lucas Barauce de Oliveira Ribas	PG15	aterials Characterization
Wednesday	14:00 - 15:30	2033	Study Of Cryogenic Deformation Of A Grade 1 Titanium Alloy	Rafaela Cordeiro Kunau	PG15	aterials Characterization
Wednesday	14:00 - 15:30	2287	Strain Rate Effect On The Mechanical Properties Of A Third Generation Advanced High Strength Steel	João Victor Marzinetti Cunha	PG15	aterials Characterization

Wednesday	14:00 - 15:30	2457	Study of the cryogenic deformation of a 2507 superduplex stainless steel	Nathan Guilherme de Oliveira	PG15	aterials Characterization
Wednesday	14:00 - 15:30	2544	Study Of Cryogenic Deformation Of Aisi 304 Stainless Steel	Nicielen Sara Schila	PG15	aterials Characterization

Area: ICONNE/Nonlinear

Chair: Samuel da Silva

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	1897	Nonlinear Dynamic Modeling and Disturbance Analysis of a Coupled Satellite-Slosh System under Reaction Wheel Imbalances	Maria Aline Gonçalves	PG1	ICONNE
Wednesday	8:00 - 9:30	985	Electrodynamics Tethers Reducing External Disturbing Forces	Antonio Fernando Bertachini A. Prado	PG1	ICONNE
Wednesday	8:00 - 9:30	1359	Dynamic Mode Decomposition For High-Fidelity Surrogate Modeling Of Offshore Drilling Systems	Lucas de Souza Kort Camp	PG1	ICONNE
Wednesday	8:00 - 9:30	1731	Analysis and Comparison of Drill Bit-Rock Interaction Models for the Study of Dynamics and Control of the Oil Well Drilling Process	Henrique Yukyo Matsuda	PG1	ICONNE
Wednesday	8:00 - 9:30	1099	Nonlinear Passive Control of a Nonideal Twin-Engine Aircraft Wing Model	Josue Lima de Camargo	PG1	ICONNE
Wednesday	8:00 - 9:30	449	Dynamic Analysis Of A Fluid-Conveying Cantilevered Pipe With A Mass Attached At The Free End	Reyolando Brasil	PG1	ICONNE

Chair: Paulo J. Paupitz Gonçalves

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	309	Optimization of Tubular Columns in the Post-Critical Regime: Impact of Imperfections on Mass and Structural Performance	Reyolando Brasil	PG1	ICONNE
Wednesday	14:00 - 15:30	1038	Studying satellite fragmentation models	Antonio Fernando Bertachini A. Prado	PG1	ICONNE
Wednesday	14:00 - 15:30	1988	Nonlinear Dynamic Behavior And Energy Generation Of A Hybrid Energy Collector Floor Under Non-Ideal Excitations	Jorge Luis Palacios Felix	PG1	ICONNE
Wednesday	14:00 - 15:30	867	On The Nonlinear Dynamics Of A System Of Two Coupled Van Der Pol Oscillators: A Broken Of Symmetry	Gabriella de Oliveira Mendes Silva	PG1	ICONNE
Wednesday	14:00 - 15:30	1655	Stability analysis of mass-spring-damper systems with nonlinear restoring force	Ronilson Rocha	PG1	ICONNE
Wednesday	14:00 - 15:30	1853	Orbital Maneuvers based in Space Tethers	Antonio Fernando Bertachini A. Prado	PG1	ICONNE

Area: Dynamics, Control, Vibrations and Acoustics

Chair: Key Fonseca de Lima

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	220	Dimensioning Acoustic Absorption For A Low Budget Home-Studio	Mário Pérez	Adm Leo	Acoustics
Wednesday	8:00 - 9:30	2464	An analytical investigation of locally resonant metamaterial in rotating beams	Adriano Todorovic Fabro	Adm Leo	Acoustics
Wednesday	8:00 - 9:30	974	Numerical Investigation Of A Labyrinthine Acoustic Metamaterial Unit Cell For Enhanced Sound Attenuation In Mufflers	Lucas Messias Cunha de Araujo	Adm Leo	Acoustics
Wednesday	8:00 - 9:30	801	An experimental investigation on the mechanical properties of 3D printed zeolite-inspired structures from vibration modes	Arthur Scarano	Adm Leo	Acoustics
Wednesday	8:00 - 9:30	2392	Experimental evaluation of the sound absorption coefficient of sugarcane and coconut composites with and without air gap	Ana Carolina Mendonça Mansur	Adm Leo	Acoustics
Wednesday	8:00 - 9:30	2228	A New Technique Using Autonomous Systems and Artificial Intelligence Algorithms to Detect Looseness in Magnetic Wedges of Hydroelectric Generators	Letícia Lorena Conceição Araçêjo	Adm Leo	Acoustics

Chair: Thiago Gamboa Ritto

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	62	Detecting Compound Faults In Rotating Machinery Using Machine Learning Algorithms	Alex Geraldo Rodrigues do Pilar	Adm Leo	Rotordynamics I
Wednesday	14:00 - 15:30	507	Comparison of Machine Learning and Deep Learning Algorithms for diagnosing faults in rolling bearings using vibration signals from the MaFaulDa database	Patric Barroso	Adm Leo	Rotordynamics I
Wednesday	14:00 - 15:30	680	Comparison of fault classification algorithms in rotating machinery using deep learning and machine learning	Patric Barroso	Adm Leo	Rotordynamics I
Wednesday	14:00 - 15:30	750	Internet of Things (IoT) Applied to Rotor Fault Diagnosis in Electrical Machines at Remote Sites	Cesar da Costa	Adm Leo	Rotordynamics I
Wednesday	14:00 - 15:30	865	Improving Fault Classification in Rotating Machinery Using Data Augmentation Techniques	Lucas Couto Lima	Adm Leo	Rotordynamics I
Wednesday	14:00 - 15:30	593	Lateral Rotordynamic Analysis of a Single-Stage sCO2 Centrifugal Compressor	Diego Zilli Lima	Adm Leo	Rotordynamics I

Area: Engineering Design

Chair: Thiago Pontin

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	1838	A Hybrid Agile-Stage-Gate Approach to Developing an Underwater Electric Brush for Invasive Sun Coral Control	Arthur Sena Marques	PG3	Design Process

Wednesday	8:00 - 9:30	1840	Application of the Agile-Stage-Gate Methodology in the Development of an Underwater Electric Hammer Drill for Sun Coral Management	Hélio Valdevieso Catarin	PG3	Design Process
Wednesday	8:00 - 9:30	380	Study of alternative methods for using optimization in ship design	Joao Victor Brunken Flores	PG3	Design Process
Wednesday	8:00 - 9:30	644	Informational design of an upper limb prosthesis actuated by shape memory alloy	Bianca Grahl Reyes	PG3	Design Process

Chair: Fernando Deschamps

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	502	Topological Optimization And Generative Design For Additive Manufacturing Of An Unmanned Aerial Vehicle	Ruben Acevedo	PG3	Design Process
Wednesday	14:00 - 15:30	2693	Developing a Novel Organizing Device for Telecommunication Cables on Intersection Utility Poles Using PRODIP Design Methodology	Gabriel Petter da Veiga	PG3	Design Process
Wednesday	14:00 - 15:30	2278	Effective Cable Packaging: A Qualitative Analysis	João Pedro Viertel Vieira	PG3	Design Process
Wednesday	14:00 - 15:30	2407	An End-to-End Methodology for Material Selection Based on User Needs and Constraints: A Case Study on Electrical Grid Infrastructure Shared with Telecommunication Companies	Gustavo Casagrande Brascher Junior	PG3	Design Process
Wednesday	14:00 - 15:30	2209	Double Cam Profiling Method for Authenticating Cable Installations in Shared Utility Poles	Lorenzo Noal	PG3	Design Process
Wednesday	14:00 - 15:30	1547	Bi-Objective Optimization Approach For Conceptual Design Of Low Reynolds Number Aircraft Using Genetic Algorithms	Caio Augusto Mascarenhas Dias Filho	PG3	Design Process

Area: Energy and Thermal Systems

Chair: Fellipe Sartori

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	356	Rotary thermomagnetic motor preliminary results: rotational speed for different experimental conditions	Marcos Tadim	EQ Aud1	Thermodynamics
Wednesday	8:00 - 9:30	675	Natural gas-fueled SOFC with integrated CO2 Brayton and ORC cycles for high efficiency power generation with geothermal auxiliary source	Tiago Becker	EQ Aud1	Thermodynamics
Wednesday	8:00 - 9:30	570	Co2 Capture In Cement Sector Using Kalina Cycle Bottoming Cogeneration	Christian Davidson Santos Costa	EQ Aud1	Thermodynamics
Wednesday	8:00 - 9:30	2588	Analysis of an expander in an organic Rankine cycle with a low-grade heat source	Juliana Silva Brasil	EQ Aud1	Thermodynamics
Wednesday	8:00 - 9:30	615	Performance Analysis Of A Free-Piston Engine With Syngas Direct Injection: A Cfd Study	Marcelo Braga dos Santos	EQ Aud1	Thermodynamics

Wednesday	8:00 - 9:30	132	Thermal properties of charcoal: data systematization and identification of gaps for applications in thermal systems	Thiago Parente Lima	EQ Aud1	Thermodynamics
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Chair: Arthur Oliveira

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	409	Experimental and numerical analysis of bio-based PCM integrated with metal foam	Gustavo Argoso dos Reis	EQ Aud1	Thermodynamics
Wednesday	14:00 - 15:30	463	Experimental Study on the Behavior of a Solar-Assisted Heat Pump Operating Under Different Water Demand Conditions	Italo Gomide	EQ Aud1	Thermodynamics
Wednesday	14:00 - 15:30	2706	Development of a Thermal Systems Modeling Software for Energy Research Applications	Alan Nakashima	EQ Aud1	Thermodynamics
Wednesday	14:00 - 15:30	1283	Constructal design of a hybrid solar-electric dryer	Guilherme Viana Costa	EQ Aud1	Thermodynamics
Wednesday	14:00 - 15:30	770	Increased Combined Cycle Flexibility via Hybridization With Parabolic Solar Collector, Allowing its Operation to Meet Peak Hourly Demand	Tales Bezerra	EQ Aud1	Thermodynamics
Wednesday	14:00 - 15:30	674	Identification of Relevant Geometric Parameters Through Sweep Sensitivity Analysis in CFD Model of Centrifugal Compressors	Guilherme Soares Gil	EQ Aud1	Thermodynamics

Chair: Eduardo dos Santos

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	434	Analysis of photovoltaic power plants with BESS in capacity reserve auctions in Brazil	Jorge Alberto Lewis Esswein Jr	EQ Aud2	Renewable
Wednesday	8:00 - 9:30	1274	Modeling Of A Solar Thermal Collector For Membrane Distillation Wastewater Treatment	Guilherme Diniz	EQ Aud2	Renewable
Wednesday	8:00 - 9:30	1626	Model-Based Assessment Of Long-Term Performance Loss In Photovoltaic Modules	Felix do Rêgo Barros	EQ Aud2	Renewable
Wednesday	8:00 - 9:30	1423	Simscape Model For Alkaline Electrolyzer With Thermal Storage And Waste Heat Utilization	Juan Jose Garcia Pabon	EQ Aud2	Renewable
Wednesday	8:00 - 9:30	1276	OTEC Renewable Energy Implementation on the Fernando de Noronha Island: Benefits and Challenges	Armando Hideki Shinohara	EQ Aud2	Renewable

Chair: Paul Maldonado

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	2623	Thermodynamic Viability Of Sanitary Sludge Drying Using Heliothermal Energy	Zudivan Peterli	EQ Aud2	Renewable

Wednesday	14:00 - 15:30	2652	Comparative study on the use of different compounds in culture medium for the production of biomass and oil from <i>Chlorella sorokiniana</i>	Camile Abdallah	EQ Aud2	Renewable
Wednesday	14:00 - 15:30	2042	Thermo-Economic Assessment Of Biogas Utilization For Electric Power Generation From Wwtp	Zudivan Peterli	EQ Aud2	Renewable
Wednesday	14:00 - 15:30	2630	Evaluation Of Alternative Phase Change Materials Properties Using T-History Method	Robert Jäckel	EQ Aud2	Renewable
Wednesday	14:00 - 15:30	1265	Automation of Photobioreactors for Efficient Microalgae-Based Biofuel Production: A Control System Approach	Rhuan Araujo	EQ Aud2	Renewable
Wednesday	14:00 - 15:30	1864	Optimizing Nitrate Sources For Enhanced Microalgal Growth And Lipid Yield In Biofuel Production	Eduarda Galvão da Silva	EQ Aud2	Renewable

Area: Solid Mechanics

Chair: Reinaldo Rodriguez-Ramos

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	229	Experimental Analysis of Thermal and Mechanical Stresses in Axial Compressor Radiators	Vinicius Costa Pereira	PG11	Fatigue
Wednesday	8:00 - 9:30	2617	Structural Analysis of Link Chains Using The Finite Element Method	Vinicius Costa Pereira	PG11	Fatigue
Wednesday	8:00 - 9:30	2814	Optimal lamination of thin plates for maximum strength using regularized angle distribution	Paulo de Tarso Mendonça	PG11	Composite
Wednesday	8:00 - 9:30	352	Damage Accumulation for Complex Multiaxial Fatigue Loads in a GRP	Jorge Alberto Rodriguez Duran	PG11	Composite
Wednesday	8:00 - 9:30	112	Micromechanical Analysis of Linear Viscoelastic Composites using Finite Element Homogenization and Representative Volume Elements	Yunior Munoz Naranjo	PG11	Composite
Wednesday	8:00 - 9:30	280	Weight optimization of composite panel using lamination parameters and surrogate modeling	Anuar Miguel Abib Onofre	PG11	Composite

Chair: Josue Labaki

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	264	Overall properties of fibrous micropolar elastic composites using multiscale homogenization	Reinaldo Rodriguez-Ramos	PG11	Composite
Wednesday	14:00 - 15:30	769	Damage Characterization and Simulation for 3D-Printed Composites	Enio Henrique Pires da Silva	PG11	Composite
Wednesday	14:00 - 15:30	2267	Design Intramedullary Nail with Angle-Ply Laminates	Lucas Vignoli	PG11	Composite
Wednesday	14:00 - 15:30	890	Analytical Method For Mitigating Stress Concentrations In A Centrally Perforated Composite Leaf Spring For Heavy-Duty Vehicle Suspensions	Guilherme Binkowski Perroni	PG11	Composite

Wednesday	14:00 - 15:30	1874	Integration of Genetic Algorithms and FEM for the Design of High-Performance Fiber-Reinforced Composites	Thiago Henrique Lara Pinto	PG11	Composite
Wednesday	14:00 - 15:30	2764	Experimental Investigation Of Crack Opening In Fiber-Reinforced Soft Composite Using Digital Image Correlation	Ana Clara Martins	PG11	Composite

Area: HVAC-R

Chair: Diogo Londero da Silva

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:45 - 9:30	2159	Design of a Double-Ring Capacitive Sensor for Flash-Gas Detection and Holdup Measurement in Refrigeration Systems	Emerson dos Reis	PGMec1	Refrigeration
Wednesday	8:45 - 9:30	108	Exergetic Analysis of a CO ₂ Transcritical Refrigeration System for Electric Aircraft	João Rufino	PGMec1	Refrigeration
Wednesday	8:45 - 9:30	1596	Data-Driven Prediction of Industrial Chiller Performance using Regression Decision Trees	Felipe Loyola	PGMec1	Refrigeration

Chair: Guilherme Ribeiro (ITA)

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	123	Experimental and computational evaluation of an automotive air-conditioning system	Diogo Londero da Silva	PGMec1	Air-conditioning
Wednesday	14:00 - 15:30	303	Strategy for Reducing Airflow in Aeronautical Environmental Control Systems to Reduce Fuel Consumption	Alan Augusto Tomaz	PGMec1	Air-conditioning
Wednesday	14:00 - 15:30	1105	Development of an experimental test bench for automotive air conditioning systems	Lucas Augusto Manica	PGMec1	Air-conditioning
Wednesday	14:00 - 15:30	1003	Development of a CFD model for AI-accelerated simulation of cabin thermal comfort	Murilo Brunazzo Medeiros	PGMec1	Air-conditioning
Wednesday	14:00 - 15:30	1014	Energy, Exergy, and Environmental Analysis of Modifications in the Cycle of a CO ₂ Direct Expansion Solar Assisted Heat Pump	Tiago Lopes	PGMec1	Heating
Wednesday	14:00 - 15:30	175	Experimental Assessment and Transient Modeling of a Sanitary Hot Water Heat Pump System	Luiz Raitz	PGMec1	Heating

Area: Aerospace Engineering

Chair: Joao Luiz F. De Azevedo

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	2059	Effect Of Geometric Variation Of The Diamond Wing Leading Edge On Rcs Estimation Of A Stealth Fighter	Newton Gomes	Adm Nobre	Aerodynamics
Wednesday	8:00 - 9:30	1309	Sweep Angle Aerodynamic Effects On Delta Wings	Wagner Gomes	Adm Nobre	Aerodynamics

Wednesday	8:00 - 9:30	1787	Estimation Of Aerodynamic Parameters For Supersonic Rockets And Ammunition	José da Rocha Miranda Pontes	Adm Nobre	Aerodynamics
Wednesday	8:00 - 9:30	1928	Flow Characterization Study Of A Gottingen Type Wind Tunnel Using Its Full-Scale Cfd Model And Experiments	Tiago Augusto Santiago Vieira	Adm Nobre	Aerodynamics
Wednesday	8:00 - 9:30	2805	A Sensitivity Study On Torque Variation Of Rotor Blade Due To Multiple Iced Sections	Enzo Ussuki	Adm Nobre	Aerodynamics
Wednesday	8:00 - 9:30	874	Cfd-Based Aerodynamic Analysis Of The Aerobee 150A Across Its Operational Regime	Patrick Christian de Melo	Adm Nobre	Aerodynamics

Chair: Leonardo Nepomuceno

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	14:00 - 15:30	1659	Experimental Evaluation Of Bioinspired Passive Flow Control Devices Applied To Propellers	Breno Lopes Tumelero	Adm Nobre	Aerodynamics
Wednesday	14:00 - 15:30	168	Stability Analysis Of A Laminar Liquid Sheet With Unequal Gas Streams Velocities	Marcio Teixeira de Mendonca	Adm Nobre	Propulsion
Wednesday	14:00 - 15:30	1081	Multi-Layer Perceptron Based Heidmann Method For Aeroengine Noise Prediction	Rafael Cuenca	Adm Nobre	Propulsion
Wednesday	14:00 - 15:30	492	Experimental Evaluation Of Pressure-Swirl Injectors Sprays Interaction For Liquid Propellant Rocket Engines	Maurício Sá Gontijo	Adm Nobre	Propulsion
Wednesday	14:00 - 15:30	1218	Artificial Intelligence Uav Propeller Noise Model Based On Empirical Data	Camila Martins	Adm Nobre	Propulsion

Area: Mechatronics

Chair: João Vitor de Carvalho Fontes

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:00 - 9:30	367	Dynamic programming method for robotic path planning with kinetic energy minimization	Rodolfo Pabst	PG7	Robotics
Wednesday	8:00 - 9:30	417	Singularity detection in serial manipulators using the differential evolution algorithm	Lucas Weihmann	PG7	Robotics
Wednesday	8:00 - 9:30	37	Development of a methodology for kinematic analysis of inchworm-type robots in adams and analytical model	Gabriela Wessling Oening	PG7	Robotics
Wednesday	8:00 - 9:30	216	Industrial robot simulation with the integration of ROS2 on KRIA boards	Juan Sebastian Toquica Arenas	PG7	Robotics
Wednesday	8:00 - 9:30	1910	Modeling and frequency analysis of 1R2T cable-driven parallel robot to avoid resonance	João Vitor de Carvalho Fontes	PG7	Robotics
Wednesday	8:00 - 9:30	2169	Trajectory planning for improving the performance of underactuated cable-driven parallel robots	Rodrigo Magalhães Cruz Alves Silva	PG7	Robotics

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
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Wednesday	14:00 - 15:30	302	Odometry of a mobile robot based on input reference using inertial sensors	Paulo Kurka	PG7	Robotics
Wednesday	14:00 - 15:30	617	Prototyping Of A Novel External Subsea Riser Inspection Robot	Daniel Cristiano Almeida Kerber	PG7	Robotics
Wednesday	14:00 - 15:30	1610	Development of an integrated electronic system for a towed submarine vehicle (towfish)	Lucca Sardá	PG7	Robotics
Wednesday	14:00 - 15:30	338	Development and evaluation of a 3D-printed damping system for natural human-robot interactions	Vinicius Mageste	PG7	Robotics
Wednesday	14:00 - 15:30	990	Computational simulation and analysis of nonlinearities in a lead screw-based machine axis	Richard Anthony Gomez Arcos	PG7	Robotics
Wednesday	14:00 - 15:30	2359	Deep neural network-based approach for inverse kinematics estimation in robotics	Laércio Raimundo Filho	PG7	Robotics

Area: Fracture, Fatigue and Structural Integrity

Chair: Roberto Dalledone

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Wednesday	8:15 - 9:30	1835	Temperature Dependence Of Fracture Toughness For An Ultrahigh Strength Steel Based On Small Size Specimens	Lucas Acquaviva Carrano de Godois	PG6	Structural Integrity
Wednesday	8:15 - 9:30	968	Assessment Of Fatigue Crack Propagation Of Aa7075 Alloy In Multi-Stage Aging Condition T6I6 Welded By Friction Stir Welding	Gustavo Mialski	PG6	Fatigue
Wednesday	8:15 - 9:30	400	Sensitivity Analysis Of The Superposition Model To Characterise The Fibre Bridging Effect On The Mode I Paris Curve	Francisco Monticeli	PG6	Fatigue
Wednesday	8:15 - 9:30	40	Impact Of Lubrication On The Loading Modes Of The Modified-Wol Specimen: A Parametric Study	Emerson Da Trindade Marcelino	PG6	Fracture
Wednesday	8:15 - 9:30	597	Structural Reliability Study Applied To The Evaluation Of A Pipeline With A Longitudinal Crack Based On Linear Elastic Fracture Mechanics	Lucas Tavares Pegoraro	PG6	Fracture