LaSPACE Fall 2026 Council Meeting Student Poster Titles

"Hyperspectral Remote Sensing of Suspended Sediment Composition for Coastal Erosion Monitoring"
Max Newman | Louisiana State University and A&M College (LSU) | GIRAF | Poster # 1

"Mapping Oyster Reef Structure and Shoreline Change with UAV-Based LiDAR"
Avi Strange | Tulane University (Tulane) | Space Grant - GIRAF | Poster # 2

"Upconverted light emission through lanthanide centered coordination complexes"
Seth Doughty | Louisiana Tech University (LaTech) | Space Grant - GSRA | Poster # 3

"Vibration Suppresssion through Adapative Input Shaping on the NASA LSMS"
Karan Baker | Louisiana State University and A&M College (LSU) | Space Grant - GSRA | Poster # 4

"Evolving Insights: Layering Complexity onto a Graph Theory Model of Student Interactions"
Nicole Biggs | Louisiana Tech University (LaTech) | Space Grant - GSRA | Poster # 5

"Modeling Galactic Cosmic Radiation (GCR)-Induced Genomic Instability Using In Vivo CRISPR-Cas Genome Editing"
Katelyn Lofton | Louisiana State University Health Sciences (LSUHSC) | Space Grant - GSRA | Poster # 6

"Reference Governor-Based Vibration Suppression for Safe and Precise Landing on NASA's STAR Testbed"
Sean Maki | Louisiana State University and A&M College (LSU) | Space Grant - GSRA | Poster # 7

"Sustainable Rice Husk-Derived Lignin Coating for Lunar Regolith Abrasion Resistance"
Jermya Wilson | Louisiana Tech University (LaTech) | Space Grant - GSRA | Poster # 8

"Entropy-Enhanced Fault Classification in Space-Based Power Systems"
Md Khairul Islam | University of Louisiana at Lafayette (ULL) | EPSCoR - RAP | Poster # 9

"Precision Motion Control for the NASA LSMS Crane Across Variable Payload Operations"
Sanjay Maharjan | Louisiana State University and A&M College (LSU) | EPSCoR - RAP | Poster # 10

"Size-Controlled Fe_3O_4 Nanoparticles Designed by Response Surface Methodology to Enhance Bioethanol Production from Hydrothermal Carbonization Liquor"
Abbas Abubakar | Louisiana Tech University (LaTech) | EPSCoR - RAP | Poster # 11

"A Haptic Teleoperation Framework for Space Construction: Performance Assessment of Kinematic and Visual Assistive Functions"
Aras Maqsoodi | Louisiana State University and A&M College (LSU) | EPSCoR - RAP | Poster # 12

"Beyond Forecast Accuracy: Satellite-Enhanced Solar Prediction for Microgrid Battery Planning"
Md Rafiqul Sarker | University of Louisiana at Lafayette (ULL) | EPSCoR - RAP | Poster # 13

"Dynamical Horizons and Unidirectional Transport without Driving"
Valeriia Bilokon | Tulane University (Tulane) | EPSCoR - RAP | Poster # 14

"Benchmarking Deep Learning and Spectral Foundation Models for Water-Quality Retrieval Using GLORIA and PACE OCI"
Mizbah Ahmed Sresto | Louisiana State University and A&M College (LSU) | EPSCoR - RAP | Poster # 15

"From Orbit to Atmosphere: Exploring the Potential Environmental Impacts of Satellite Reentry"
Guolong Li | Tulane University (Tulane) | EPSCoR - RAP | Poster # 16

"LaACES DemonSats-7 Payload Experiment: Exploring Airflow Dynamics of Sounding Balloon Flight"
Anna Dugas | Northwestern State University of Louisiana (NSULA) | Space Grant - LaACES | Poster # 17

"Development of a LaACES Balloon Payload for Atmospheric Data Collection and Analysis"
Solida Tan | McNeese State University (McNeese) | Space Grant - LaACES | Poster # 18

"Development of a LaACES Balloon Payload for Atmospheric Data Collection and Analysis"
Rohitpreet Singh | McNeese State University (McNeese) | Space Grant - LaACES | Poster # 19

"2025-2026 Krewe of Balloon Atmospheric Data Acquisition"
Deirdre Murphy | Loyola University (Loyola) | Space Grant - LaACES | Poster # 20

"Temperture Sensor Calibration for a Silicon Diode"
Tomasso Fennell | Loyola University (Loyola) | Space Grant - LaACES | Poster # 21

"Battery Operation Informed Temperature Prediction for Cooling-Aware Microgrid Day-Ahead Scheduling"
Jose Betancourt | McNeese State University (McNeese) | EPSCoR - Other | Poster # 22

"Development of an Automated Image-Processing Framework for Thermophysical Property Characterization Using Electrostatic Levitation"
Mootaz Anany | University of Louisiana at Lafayette (ULL) | EPSCoR - Other | Poster # 23

"From Data to Decisions: Improving NASA Disaster Response Operations"
Leslie Ward | Louisiana State University and A&M College (LSU) | Internship | Poster # 24

"Manufacturing Engineering in Aerospace: Propellant Tank Production and Assembly"
Jacob Harding | Louisiana State University and A&M College (LSU) | Space Grant - Internship | Poster # 25

"Thermal-Structural Analysis of a Heat Exchanger Housing Using NASTRAN"
Brennon Stevens | Louisiana State University and A&M College (LSU) | Space Grant - Internship | Poster # 26

"Cislune: Advancing Lunar Exploration Through Robotics, Engineering, and Resource Utilization"
Aanooalii Filoialii | Louisiana State University and A&M College (LSU) | Space Grant - Internship | Poster # 27

"Mechanical Engineering Applications In Spacecraft Thermal Management, Structural Design, and Manufacturing"
Gavin Peters | Louisiana Tech University (LaTech) | Space Grant - Internship | Poster # 28

"Quality Engineering and Manufacturing Processes in Aircraft Exterior Production"
Gabriel Lamperez | Tulane University (Tulane) | Space Grant - Internship | Poster # 29

"Rotary Kiln Test Stand Reactivation & NOVA: AI Document Processing System"
Vinh Bui | Louisiana State University and A&M College (LSU) | Space Grant - Internship | Poster # 30

"Manufacturing Engineering Internship at Vivace International: COPV Production and X-Ray Inspection Tooling Design"
Abigail Peck | Louisiana State University and A&M College (LSU) | Space Grant - Internship | Poster # 31

"Coastal Wetland Aboveground Biomass Mapping Using Earth Observation Foundation Models"
Shuqi Wu | Louisiana State University Agricultural Center (LSU-Ag) | Space Grant - Other | Poster # 32

"Evaluating the Relationship Between Formaldehyde Levels and Environmental Factors (Wind and Temperature) Near Xavier University of Louisiana (2024)"
Kaylin Allen | Xavier University of Louisiana (Xavier) | Space Grant - Other | Poster # 33

"Saharan Dust Over New Orleans"
Xavier Musquiz | Xavier University of Louisiana (Xavier) | Space Grant - Invitation | Poster # 34

"Investigating Nitrogen Dioxide Variability and Meteorological Influences in New Orleans, Louisiana"
Oluwatobiloba Adejumo | Xavier University of Louisiana (Xavier) | Space Grant - Invitation | Poster # 35

"Effects of Heavy Metal Exposure from Wetland Pollutants on Brain Glutamate Levels in Mice"
Josephine Day | Louisiana Tech University (LaTech) | Space Grant - LASSO | Poster # 36

"Impact of nickel on exoskeletal mineralization in the post-ecdysial blue crab, Callinectes sapidus"
Mia Wright | Nicholls State University (Nicholls) | Space Grant - LASSO | Poster # 37

"Additively manufactured motion activated bistable and self-deployable auxetic metamaterials"
Evan Simon | Southeastern Louisiana University (SELU) | Space Grant - REA | Poster # 38

"Robotic Additive Manufacturing of Support-Free Parts Using Non-Planar Slicing Algorithm and Five-Axis Print Path"
Christian Rust | Southeastern Louisiana University (SELU) | Space Grant - REA | Poster # 39

"Precision Assembly of Space Structures Through Input Shaping-Based Vibration Control"
Darren Johnson | Louisiana State University and A&M College (LSU) | Space Grant - REA | Poster # 40

"Generating eight-day Photosynthetic Capacity Product from PACE Hyperspectral Observations"
Chi Qiu | Louisiana State University Agricultural Center (LSU-Ag) | Space Grant - REA | Poster # 41

"Modeling and Analysis of Additive Friction Stir Deposition of Lunar Regolith-Integrated Aluminum Alloy"
Md Ashfaq Siddiquee | Louisiana Tech University (LaTech) | Space Grant - REA | Poster # 42

"Leveraging Earth Observation Foundation Models for Characterizing Soil Properties"
Chi Qiu | Louisiana State University Agricultural Center (LSU-Ag) | Space Grant - REA | Poster # 43

"Experimental and Kinetic Modeling Study of Oxy-combustion of C1-C4 Hydrocarbon Fuels: Application towards space propulsion"
Andre' Pinell | University of Louisiana at Lafayette (ULL) | Space Grant - REA | Poster # 44

"Louisiana State Rocket"
Yui Hatsuyuki | Louisiana State University and A&M College (LSU) | Space Grant - SAFOS | Poster # 45

"Modeling and Validating Heat Generation Mechanisms in Ultrasonic Welding of Thermoplastic Composites"
Felipe Savella | Louisiana State University and A&M College (LSU) | NASA EPSCoR - Basic Research | Poster # 46

"Experimental Investigation of Degree of Healing Between Dissimilar Thermoplastic Materials for Ultrasonic Welding"
Md Masud Rana | Louisiana State University and A&M College (LSU) | Other | Poster # 47

"Generating Functionally Mature hiPSC Motor Neurons for Space Environment Simulation Research"
Joshua Rychart | Louisiana Tech University (LaTech) | NASA EPSCoR - Basic Research | Poster # 48

"Bright lanthanide and transition metal coordination complexes for NASA missions"
Lily Townsend | Louisiana Tech University (LaTech) | Senior Design | Poster # 49

"Dimensional accuracy of additively manufactured parts"
Joseph Robinson | Southeastern Louisiana University (SELU) | Space Grant - Senior Design | Poster # 50

"Simultaneous improvement of tensile properties and surface finish of additively manufactured parts"
Aaron Christiansen | Southeastern Louisiana University (SELU) | Space Grant - Senior Design | Poster # 51

"Design and Implementation of an Autonomous Solar Tracking System"
Joshua France | McNeese State University (McNeese) | Space Grant - Senior Design | Poster # 52

"Digital twin, traffic-signal recognition, synthetic-to-real learning, spatiotemporal , YOLO, ResNet-18, GRU, Unreal Engine."
Collins Adu Addo | Louisiana State University and A&M College (LSU) | other | Poster # 53

"Student Engagement in Space Activities at Xavier(SESAX)"
Christopher Adams | Xavier University of Louisiana (Xavier) | Space Grant - STEMS | Poster # 54

"Extracting Bioactive Compounds from Coffee Silverskins"
Reagan Tapie | Louisiana Tech University (LaTech) | LURA | Poster # 55

"Optimal Periodic Trajectory Generation for Long-Range Autonomous Cargo Delivery Using Fixed-Wing UAVs"
Don Nguyen | Louisiana State University and A&M College (LSU) | Space Grant - LURA | Poster # 56

"Learning-Based Model Predictive Control for Autonomous Quadcopter Navigation via EDMD-c"
Peyton Bell | Louisiana State University and A&M College (LSU) | Space Grant - LURA | Poster # 57

"Design and Implementation of a Controlled Fuel Preheating Module for High-Speed Propulsion Applications"
Marc St Martin | Louisiana State University and A&M College (LSU) | Space Grant - LURA | Poster # 58

"Battery Degradation Modeling and Lifetime Assessment for Lunar Energy Storage Systems in Harsh Lunar Environments"
Blake Langley | McNeese State University (McNeese) | Space Grant - LURA | Poster # 59

"Predictive Safety Modeling of Reactive Particles in Space Manufacturing and In-Situ Resource Utilization"

Isabelle Lieux | Louisiana Tech University (LaTech) | Space Grant - LURA | Poster # 60

"Synthesis and Structural Characterization of Novel Supertetrahedral-based Indium Pnictide Zintl Phases"

George Tisdale | Louisiana State University and A&M College (LSU) | Space Grant - LURA | Poster # 61

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