



2026 Latin American CubeSat Workshop - Jurerê Beach Village, Florianópolis, SC, Brazil



15 March - Sunday



Registration

08:30-08:45 **Opening ceremony**

08:45-10:00 **Keynote - Dr. Luis Loures da Costa (ITA)**

"Artemis and Brazil"



10:00-10:30 **Coffee break**

10:30-12:30 **Institutional Strategic Session**
AEB, INPE, IFRN, UFSC, UNESP, ITA (Moderator)

Brazil's Small Satellite Programmes:
Regional Opportunities and Strategic
Partnerships



12:30-14:00 **LUNCH**

14:00-14:15 LACW-26-01-01

14:15-14:30 LACW-26-01-02

14:30-14:45 LACW-26-01-03

14:45-15:00 LACW-26-01-04

15:00-15:15 LACW-26-02-01

15:15-15:30 LACW-26-02-02

15:30-15:45 LACW-26-02-03

15:45-16:00 LACW-26-02-04



16:00-16:30 **Coffee break**

16:30-16:45 LACW-26-03-01

16:45-17:00 LACW-26-03-02

17:00-17:15 LACW-26-03-03

17:15-17:30 LACW-26-03-04

17:30-17:45 LACW-26-04-01

17:45-18:00 LACW-26-04-02

18:00-18:15 LACW-26-04-03

18:15-18:30 LACW-26-04-04



19:00-22:00 **Welcome cocktail**

16 March - Monday



Registration

09:00-09:30 **Invited talk - Dr. Moisés Souto**
"The Potiguar Constellation"

09:30-09:45 LACW-26-05-01

09:45-10:00 LACW-26-05-02



10:00-10:30 **Coffee break**

10:30-10:45 LACW-26-06-01

10:45-11:00 LACW-26-06-02

11:00-11:15 LACW-26-06-03

11:15-11:30 LACW-26-06-04

11:30-11:45 LACW-26-07-01

11:45-12:00 LACW-26-07-02

12:00-12:15 LACW-26-07-03

12:15-12:30 LACW-26-07-04



12:30-14:00 **LUNCH**

14:00-15:00 **Invited talk - Ana Ambrósio**
"SimCBERS - A step forward to
INPE's autonomy in Operational
Satellite Simulator"

15:00-16:00 **Invited talk - Ítalo Rodrigues**
"From Large Satellites to
CubeSats: Are Operational
Simulators Still Worth It?"



16:00-16:30 **Coffee break**

16:30-16:45 LACW-26-08-01

16:45-17:00 LACW-26-08-02

17:00-17:15 LACW-26-08-03

17:15-17:30 LACW-26-08-04

17:30-17:45 LACW-26-09-01

17:45-18:00 LACW-26-09-02

18:00-18:15 LACW-26-09-03

18:15-18:30 LACW-26-09-04

18:30-18:45 **Closing ceremony**

17 March - Tuesday



Registration

09:00-10:00 **TUTORIAL - Martin Le Bourgeois**
(ObesoSoft Canada Inc.)
"Capella - Model-Based Systems
Engineering"



10:00-10:30 **Coffee break**

10:30-12:30 **TUTORIAL - Ernesto Sanchez**
Politecnico di Torino, Italy



12:30-14:00 **LUNCH**

14:00-15:30 **TUTORIAL - Fernanda Kastensmidt**
(UFRGS) "Using Fault Tolerant AI
Accelerators into SRAM-FPGAs
for Earth Observation"



15:30-16:00 **Coffee break**

16:00-17:30 **How can we qualify integrated circuits
for Aerospace Applications in Latin
America?**

Marcilei Guazzelli (FEI)
"Radiation Exposure and CubeSats"

Nilberto Medina (IF/USP)
"High-Energy Radiation Testing: Towards
Reliable CubeSat Missions"

Apoio Institucional



Apoio financeiro



Sunday, March 15

08:45-10:00	KEYNOTE	Artemis and Brazil SelenITA: Brazil's 16U Nanosatellite Mission to the Moon under NASA's Artemis Programme Dr. Luis Loures da Costa (ITA)
10:00-10:30		Coffee break
10:30-12:30	Institutional Strategic Session	"Brazil's Small Satellite Programmes: Regional Opportunities and Strategic Partnerships" AEB, INPE, IFRN, UFSC, UNESP, ITA Moderator: Dr. Luis Loures da Costa
12:30-14:00		LUNCH
SESSION 1 - CUBESAT MISSIONS, SPACE REGULATIONS AND INTERNATIONAL COOPERATION Chair: Dr. Paolo Gessini		
14:00-14:15	LACW-26-01-01 UnB	Mission Analysis and Simulation for Data Collection and Study of the South Atlantic Magnetic Anomaly Dara Cristina Fernandes
14:15-14:30	NO-SHOW UERJ	CariocaSat: A Student-Developed Autonomous CNC Payload for Suborbital Manufacturing Kataryne Ferreira Cunha de Almeida
14:30-14:45	LACW-26-01-02 UFMA	CubeSats and ESA's Zero Debris Approach: Challenges and Strategies for Debris Mitigation in LEO Orbit Dara Cristina and Helena Emery Silvano
14:45-15:00	LACW-26-01-03 UDESC / Yangzhou University, China	Brazil-China Educational Space Partnership: Inspiring STEM through Nanosatellite Missions Sergio Pezzin
SESSION 2 - ASSEMBLY, INTEGRATION AND TEST Chair: Dr. Edemar Morsch Filho		
15:00-15:15	LACW-26-02-01 UFSC	Development of a Practical Approach for Thermal Vacuum Cycling Tests for CubeSat Applications Vitoria Tessari
15:15-15:30	LACW-26-02-02 UFSC	Dynamic Vibration Testing of CubeSat Electrical Power Systems: A Subsystem Methodology and Experimental Validation Airtton Jose Schmitt Junior
15:30-15:45	LACW-26-02-03 Bizu Space	Protoflight Qualification of the 1U CubeSat Deployer BizuPod Joliver Kozlowski
15:45-16:00	LACW-26-02-04 UFSC	Methodology for CubeSat Environmental Tests Maria Eduarda Emiliano Rezende

16:00-16:30

Coffee break

SUNDAY

SESSION 3 - SPACE PROPULSION AND AOCS

Chair: Dr. Rodrigo Cassineli

16:30-16:45 LACW-26-03-01

UnB

Design, Modeling, and Validation of a Modular Single-Axis AOCS for a 2U CubeSat
Helena Emery Silvano

16:45-17:00 LACW-26-03-02

Universidad
Adolfo Ibáñez,
Chile

Development of a micro pulsed plasma thruster for CubeSat Attitude Control
Rodrigo Cassineli

17:00-17:15 LACW-26-03-03

UFSC

A Detumbling Attitude Control Strategy for the FloripaSat-2 and FloripaSat-3 CubeSat Platforms
Ícaro Aquino

17:15-17:30 LACW-26-03-04

UnB

Development of a micro PPT for the SAPIENS CubeSat Mission
Laura Monte

SUNDAY

SESSION 4 - BATTERY SYSTEMS AND THERMAL ANALISYS

Chair: Dr. Talita Possamai

17:30-17:45 LACW-26-04-01

UFSC

Experimental Evaluation of EPS Battery Heater Interfaces and Conformal Coating Behavior under Thermal-Vacuum Conditions for CubeSats
Maria Carolina Amarante

17:45-18:00 LACW-26-04-02

UNESP

Thermal Control of Battery using Phase-change Materials
Edemar Morsch Filho

18:00-18:15 LACW-26-04-03

UFSC

Impact of Thermal Contact Conductance on a 1U Cubesat Model
Talita Sauter Possamai

18:15-18:30 LACW-26-04-04

UFSC

A Case Study of Cell Balancing in a CubeSat Battery Management System (BMS) of the FloripaSat-2 Platform
Arthur Farias de Souza Filho

19:00-22:00

Welcome cocktail

Monday, March 16

09:00-09:30		INVITED TALK	"Potiguar Satellite Constellation: PotiguarSat-01 as a Regional Contribution to the GOLDS Initiative" Dr. Moisés Souto (IFRN / INPE-RN)
SESSION 5 - ENERGY CONSUMPTION AND ORBIT ANALYSIS - Chair: Dr. Ítalo Rodrigues			
09:30-09:45	LACW-26-05-01	UFMG	Modeling and Preliminary Sizing of the Electrical Power Subsystem for the PdQSat Mission Rosana Cabello Russo Magalhães Silva
09:45-10:00	LACW-26-05-02	SENAI CIMATEC	Orbital Analysis of a 1U CubeSat in LEO with Altitude and Inclination Variations Using GMAT Simulations Caique Sales e a Maria Eduarda Rezende
10:00-10:30	Coffee break		
SESSION 6 - ADCS SIMULATION - Chair: Dr. Ana Ambrósio			
10:30-10:45	LACW-26-06-01	USP	A Hardware-in-the-Loop Architecture for CubeSat ADCS Verification Using SimuCam Rodrigo de Marca França
10:45-11:00	LACW-26-06-02	USP	ADCS Simulator for Low Earth Orbit CubeSats: GUI Modules Development David Arruda de Sousa
11:00-11:15	LACW-26-06-03	USP	From Open-Loop to Science Pointing: A Generic ADCS Pointing Mode State Machine and Development Thallysson Maldonado Ramos
11:15-11:30	LACW-26-06-04	USP	ADCS Simulation for Low Earth Orbit CubeSats: An Implementation of Reference Generation, Control Strategies, and Data Management Layers Vinicius Álvares Pereira
SESSION 7 - ON-BOARD COMPUTING ARCHITECTURES AND FAULT TOLERANCE - Chair: Dr. Antonio Cassiano Julio Filho			
11:30-11:45	LACW-26-07-01	UFC	Dynamic In-System Reprogramming and Validation of Fault-Tolerant FPGA Logic in Nanosatellite Embedded Systems Alexandre Almeida
11:45-12:00	NO-SHOW	UFSC	Development of a Radiation-Tolerant FPGA-Based Embedded System for Space Applications Rebecca Quintino do Ó
12:00-12:15	LACW-26-07-02	ITA	Binary-Domain Visual Processing: A High-Throughput and Fault-Tolerant Foundation for FPGA-Based On-Board Inference Gleisson de Souza Bezerra
12:15-12:30	LACW-26-07-03	INPE	Advances in Small Satellite Payload Validation: The Environmental Data Collector on INPE's Multi-Mission Platform Antonio Cassiano Julio Filho
12:00-14:00	LUNCH		

14:00-15:00		INVITED TALK	"SimCBERS - A step forward to INPE's autonomy in Operational Satellite Simulator" Dr. Ana Ambrósio (INPE / Omega7 Systems)
15:00-16:00		INVITED TALK	"From Large Satellites to CubeSats: Are Operational Simulators Still Worth It?" Dr. Ítalo Rodrigues (INPE / UniFOA)
16:00-16:30		Coffee break	
MONDAY		SESSION 8 - GROUND SEGMENT Chair: Dr. Xisto Lucas Travassos Junior	
16:30-16:45	LACW-26-08-01	IFRN	Automatic Generation and Execution of Interoperability Tests for Multimission Ground Stations: A Three-Phase Framework Supported by LLMs and RAG Moises Cirilo de Brito Souto
16:45-17:00	LACW-26-08-02	UFSC	Field Evaluation of GEO NTN NB-IoT: Reliability Limits for Mission-Critical IoT Arthur Rodrigues Fernandes
17:00-17:15	LACW-26-08-03	UFSC	Enhancing CubeSat Telemetry Interpretation Through Artificial Intelligence and Conversational Interfaces Caique Sales de Miranda Gomes
17:15-17:30	LACW-26-08-04	INPE	F4GSA: A Model-Based Framework for Ground Segment Architectures in Space Missions Antonio Cassiano Julio Filho
MONDAY		SESSION 9 - TELECOMMUNICATIONS AND ANTENNAS Chair: Dr. Xisto Lucas Travassos Junior	
17:30-17:45	LACW-26-09-01	ITA	Robustness of Angle of Arrival (AoA) Estimation Against Doppler Shift in CubeSat Payloads for Ka-Band Communications Rafael S. S. Cruz
17:45-18:00	LACW-26-09-02	UFSC	Strategic and Methodological Framework for the Selection and Implementation of S-Band Antennas on CubeSat Platforms Yunior Alcantara Guevara
18:00-18:15	LACW-26-09-03	UFSC	Optimizing the Catarina Constellation with Reduced Design Variables: An Analysis of RAAN Sensitivity Guilherme Peinador Gomes
18:15-18:30	NO-SHOW	UFSC	Array of Patch Antennas for Radio Occultation Mission Lucas Ryan Carneiro
18:30-18:45	Closing ceremony - Best paper awards!		

Tuesday, March 17

09:00-10:00	TUTORIAL	"Capella - Model-Based Systems Engineering" Mr. Martin Le Bourgeois (ObeoSoft Canada Inc.)
10:00-10:30		Coffee break
10:30-12:30	TUTORIAL	"SDC in AI devices" Dr. Ernesto Sanchez (Politecnico di Torino, Italy)
12:30-14:00		LUNCH
14:00-15:30	TUTORIAL	"Using Fault Tolerant AI Accelerators into SRAM-FPGAs for Earth Observation" Dr. Fernanda Kastensmidt (UFRGS, Brazil)
15:30-16:00		Coffee break
16:00-17:30	PANEL	"How can we qualify integrated circuits for Aerospace Applications in Latina America?" Dr. Marcilei Guazzelli (FEI) - "Radiation Exposure and CubeSats" Dr. Nilberto Medina (IF/USP) - "High-Energy Radiation Testing: Towards Reliable CubeSat Missions" Dr. Luigi Dilillo, CNRS/University of Montpellier, France Dr. Fernando Fernandes, INRIA, France Dr. Fernanda Kastensmidt (UFRGS, Brazil), Moderator