



Joint 5th IAA Latin American CubeSat Workshop and 3rd IAA Latin American Symposium on Small Satellites

Preliminary Program - Brasilia Time Zone (GMT -3)

7 November 2022 - Monday	
Registration	
08:45-09:00	Opening ceremony
09:00-09:45	Keynote: C. Cappelletti
09:45-10:15	Coffee break
10:15-11:15	Panel: The Role of Small Satellites in Space
11:15-11:30	IAA-BR-22-01-01
11:30-11:45	IAA-BR-22-01-02
11:45-12:00	IAA-BR-22-01-03
12:00-13:30	LUNCH
13:30-14:15	Keynote: C. Trein
14:15-14:30	IAA-BR-22-02-01
14:30-14:45	IAA-BR-22-02-02
14:45-15:00	IAA-BR-22-02-03
15:00-15:30	Coffee break
15:30-15:45	IAA-BR-22-03-01
15:45-16:00	IAA-BR-22-03-02
16:00-16:15	IAA-BR-22-03-03
16:15-16:30	IAA-BR-22-03-04
16:30-16:45	IAA-BR-22-03-05
16:45-17:00	IAA-BR-22-03-06
17:00-18:00	Panel: The Next Generation in Space
Welcome cocktail	

8 November 2022 - Tuesday	
Registration	
09:00-09:45	Keynote: A. Molinas
09:45-10:15	Coffee break
10:15-10:30	IAA-BR-22-04-01
10:30-10:45	IAA-BR-22-04-02
10:45-11:00	IAA-BR-22-04-03
11:00-11:15	IAA-BR-22-04-04
11:15-11:30	IAA-BR-22-05-01
11:30-11:45	IAA-BR-22-05-02
11:45-12:00	IAA-BR-22-05-03
12:00-13:30	LUNCH
13:30-14:15	Keynote: C. Duarte
14:15-14:30	IAA-BR-22-06-01
14:30-14:45	IAA-BR-22-06-02
14:45-15:00	Invited Talk: P. Bareš
15:00-15:30	Coffee break
15:30-15:45	IAA-BR-22-07-01
15:45-16:00	IAA-BR-22-07-02
16:00-16:15	IAA-BR-22-07-03
16:15-16:30	IAA-BR-22-07-04
16:30-16:45	IAA-BR-22-07-05
16:45-18:00	Tutorial 1: A Simple Onboard Computer for Cubesats with Micropython
Gala Dinner	

9 November 2022 - Wednesday	
Registration	
09:00-09:45	Keynote: J. Spann
09:45-10:15	Coffee break
10:15-11:15	Panel: Space Law
11:15-11:30	IAA-BR-22-08-01
11:30-11:45	IAA-BR-22-08-02
11:45-12:00	IAA-BR-22-08-03
12:00-13:30	LUNCH
13:30-14:15	Keynote: A. Silva
14:15-14:30	IAA-BR-22-09-01
14:30-14:45	IAA-BR-22-09-02
14:45-15:00	IAA-BR-22-09-03
15:00-15:30	Coffee break
15:30-15:45	IAA-BR-22-10-01
15:45-16:00	IAA-BR-22-10-02
16:00-16:15	IAA-BR-22-10-03
16:15-16:30	IAA-BR-22-10-04
16:30-16:45	IAA-BR-22-11-01
16:45-18:00	Tutorial 2: Python and Cubesats
Gala Dinner	

10 November 2022 - Thursday	
Registration	
09:00-09:45	Keynote: L. Gratton
09:45-10:15	Coffee break
10:15-10:30	IAA-BR-22-12-01
10:30-10:45	IAA-BR-22-12-02
10:45-11:00	IAA-BR-22-12-03
11:00-11:15	IAA-BR-22-12-04
11:15-11:30	IAA-BR-22-13-01
11:30-11:45	IAA-BR-22-13-02
11:45-12:00	IAA-BR-22-13-03
12:00-13:30	LUNCH
13:30-14:15	Keynote: L. Loures
14:15-14:30	IAA-BR-22-14-01
14:30-14:45	IAA-BR-22-14-02
14:45-15:00	Invited Talk: G. Santilli
15:00-15:30	Coffee break
15:30-15:45	IAA-BR-22-15-01
15:45-16:00	IAA-BR-22-15-02
16:00-16:15	IAA-BR-22-15-03
16:15-16:30	IAA-BR-22-15-04
16:30-16:45	Poster Session
16:45-18:00	Panel: Space Education
Closing ceremony	

Day 1 - Monday, 7 November 2022
Morning

Opening ceremony

"The International Academy of Astronautics and its Activities"

Keynote Speaker: CHANTAL CAPPELLETTI
IAA, University of Nottingham, UK

Keynote Speaker: JEAN-MICHEL CONTANT
IAA Secretary General, France

PANEL

"The Role of Small Satellites in Space"

Rodrigo Leonardi, AEB, Brazil (Chair)
Alejandro Román Molinas, Paraguayan Space Agency, Paraguay
Carlos Roberto Duarte Muñoz, Mexican Space Agency, Mexico
Chantal Cappelletti, IAA, University of Nottingham, UK
James Spann, NASA Headquarters, USA
Livio Gratton, National University of San Martín, Argentina

Session 1 - CUBESATS AND SMALL SATELLITES ENHANCING SPACE PROGRAMS - Chair: Carlos Moura, AEB, Brazil

IAA-BR-22-01-01 [11:15-11:30]	Small Satellites for Sustainable Science and Development in Africa: Policy Perspectives	Anietie Ekanem and Peter Ekweozoh
IAA-BR-22-01-02 [11:30-11:45]	Mission Design of Catarina Constellation's Fleet A: a systems engineering case study	Damylle Cristina Xavier Donati, Rodrigo da Silva Cardozo, Ludmila Kopko, Pieter Von Tilburg Bernardes, Nicole Korres Borges, Talita Sauter Possamai , Augusto Marasca de Conto and Christopher Shneider Cerqueira
IAA-BR-22-01-03 [11:45-12:00]	Recent Developments at INPE's Small Satellites Division	Walter Abrahão dos Santos , Antonio Carlos de Oliveira Pereira Junior, Lincoln Teixeira, Bruno Carneiro Junqueira, Marcus Vinicius Cisotto, Antonio Cassiano Julio Filho, Auro Tikami, Luiz Antonio dos Reis Bueno, Lázaro Aparecido Pires Camargo, ngelo José Augusto Florentino, Antonio Ferreira de Brito, and Andrés Fernando Paredes Horna

Day 1 - Monday, 7 November 2022 - Afternoon

"Enabling a New Space Ecosystem in Brazil: The Role of Nano and Small Sats" - Keynote Speaker: CRISTIANO TREIN, AEB, Brazil

Session 2 - MISSION APPLICATIONS I - Chair: Petr Bareš, Honorary President of the Czech Space Alliance, Czech Republic

IAA-BR-22-02-01 [14:15-14:30]	Avion satellite and the physical experiments onboard	Vitaly Bogomolov, Yurii Zailko, Anatoly Iyudin, Vladimir Kalegaev, Ivan Kucherenko, Vladislav Osedlo, Oleg Peretyat'Ko, Mikhail Prokhorov and Sergey Svertilov
IAA-BR-22-02-02 [14:30-14:45]	A Payload Proposal for Lightning Flash Detection using a Nanosatellites	Lazaro Camargo, Walter Abrahao Dos Santos, Kleber Naccarato, Jhonathan Murcia Piñeros, Auro Tikami, Antonio Carlos de Oliveira Pereira Junior, Antonio Cassiano Julio Filho, Marcus Vinicius Cisotto, Luiz Antonio dos Reis Bueno, Ângelo José Augusto Florentino, Lincoln Teixeira, Bruno Carneiro Junqueira, Andres Paredes Horna and Antonio Brito
IAA-BR-22-02-03 [14:45-15:00]	Near Earth Asteroid Cubesat Mission: Selection of the Body and Discussion on the Mission Requirements	Damiana Irrera and Juan David Blanco Camargo

Session 3 - ATTITUDE DETERMINATION AND CONTROL SYSTEMS - Chair: James Spann, NASA, USA.

IAA-BR-22-03-01 [15:30-15:45]	Magnetic parameters estimation and attitude motion reconstruction using in-flight magnetometer measurements of the AlfaCruz CubeSat	Emanuel C. Brenag, Bruno T. de Mello, Matheus L. Arruda, Renato A. Borges, Danil Ivanov, Uliana Monakhova, Yaroslav Mashtakov and Mikhail Ovchinnikov
IAA-BR-22-03-02 [15:45-16:00]	Model Predictive Control for Attitude Maneuvers of a Nanosatellite	Tomás Cardoso Miranda, Maria Cecilia Pereira Faria, Marcelo Alves Santos and Guilherme Vianna Raffo
IAA-BR-22-03-03 [16:00-16:15]	Design and simulation of a model to determine the attitude and control the orientation of a CubeSat	Johrdan Huamanchumo, Soledad Fernandez, Cristopher Rufasto, George Fajardo and Omar Blas, John Haile Abad Antialon
IAA-BR-22-03-04 [16:15-16:30]	Attitude reconstruction of the AlfaCruz CubeSat using onboard sensors and solar panels in-orbit data	Bruno T. de Mello, Renato A. Borges and Simone Battistini
IAA-BR-22-03-05 [16:30-16:45]	Ptolemy II Framework as a Tool for Analyzing Attitude Control Algorithms for Nanosatellites	Alex Alves, Luiz Silveira, Samaherni Dias and Márcio Kreutz
IAA-BR-22-03-06 [16:45-17:00]	Design of ADCS system for Earth Observation using a 3-unit CubeSat	Adolfo Chaves-Jimenez, Giancarlo Vargas-Villegas, Alberto Zamora-Mendieta, Carlos A. Fernandez-Cerdas, Jonathan Kolbeck, Mauricio Munoz-Arias

PANEL: "The Next Generation in Space", Chair: Isidora Casas del Valle, SGAC South American Regional Coordinator, Chile

Day 2 - Tuesday, 8 November 2022

Morning

"Aerospace Development from an Emerging Country Perspective: The case of Paraguay (First CubeSat mission-GuaraniSat-1)"

Keynote Speaker: ALEJANDRO ROMÁN MOLINAS, Paraguayan Space Agency, Paraguay

Session 4 - GROUND SEGMENT - Chair: Moises Souto, IFRN, Brazil

IAA-BR-22-04-01 [10:15-10:30]	Ground and Flight Segment for tracking and transmissions for Stratospheric Balloons	João Braga, Antonio Cassiano Julio Filho, Sergio de Oliveira and Marconi Pereira
IAA-BR-22-04-02 [10:30-10:45]	EMMN - Reports about a Multi-Mission Ground Station on Cubesats Tracking	Hilario Castro, Jefferson Silva, Manoel Carvalho, Lucio Jotha and Moises Souto
IAA-BR-22-04-03 [10:45-11:00]	A Proposal for a Space Weather Ground-Based Segment Using Software-Defined Radio and Cognitive Radio	Jaime Enrique Orduy Rodriguez, Walter Abrahao dos Santos, Claudia Maria Nicoli Candido, and Douglas Soares dos Santos, and Daniel Santiago Umaña Salinas
IAA-BR-22-04-04 [11:00-11:15]	New Challenges for Ground Segment Development: Scientific Small Satellite Missions	Antonio Cassiano Julio Filho, Antonio Carlos de Oliveira Pereira Junior, Walter Abrahao dos Santos, Marcus Vinicius Cisotto, Auro Tikami, Luiz Antonio dos Reis Bueno, Ângelo José Augusto Florentino, Antonio Ferreira de Brito, Lincoln Teixeira, Lazaro Aparecido Pires Camargo, Bruno Carneiro Junqueira and Andres Paredes Horna

Session 5 - EMBEDDED SYSTEMS RELIABILITY - Chair: Jarbas da Silveira, UFC, Brazil

IAA-BR-22-05-01 [11:15-11:30]	A Performance Evaluation of a Fault-tolerant RISC-V with Vector Instruction Support to Space Applications	Carolina Imianosky, Douglas A. dos Santos, Douglas Rossi de Melo, Luigi Dillillo, Cesar A. Zeferino, Eduardo A. Bezerra and Felipe Viel
IAA-BR-22-05-02 [11:30-11:45]	Improving Space Robustness and Reliability on Nanosatellite On-Board Equipment	Lincoln Teixeira, Bruno Junqueira, Valentino Lau, Denio Panissi, Rafael Costa, Gledson Diniz, Jose May, Jonilson Adachi, Ana Rabello, Durval Zandonadi, Antonio Pereira, Walter Abrahao, Marcus Cisotto, Antonio Filho, Auro Tikami, Luiz Bueno, Lazaro Camargo, Angelo Florentino, Antonio Brito and Andres Horna
IAA-BR-22-05-03 [11:45-12:00]	An SRAM Memory's error detector and corrector system based on FPGA for CubeSats onboard computer	Luis Claudio de Oliveira Silva, Jose de Ribamar Braga Pinheiro Junior, Carlos Alberto Rios Brito Junior, Allan Kardec Barros, Edeilson Pereira Pestana, Magalhaes Geovaana Maria de Moura Couto and Lucas Souza Azulay

Day 2 - Tuesday, 8 November 2022

Afternoon

"Best Practices for the Development of Cubesat Missions"
Keynote Speaker: **CARLOS DUARTE MUÑOZ**, Mexican Space Agency, Mexico

Session 6 - EDUCATIONAL SYSTEMS AND MISSIONS - Chair: Carlos Alberto Rios Brito Junior, UFMA, Brazil

IAA-BR-22-06-01 [14:15-14:30]	Blockchain Applied in the Update the Firmware of Nanosatellites Constellations	Jose Edilson Silva Filho, José Danilo da Silva Coutinho Filho, Igor Braga Palhano and Jarbas Aryel Nunes da Silveira
IAA-BR-22-06-02 [14:30-14:45]	Enhancing STEAM Education Through Multimission Platform Development Using Stratospheric Balloon	Auro Tikami, Antonio Carlos de Oliveira Pereira Junior, Walter Abrahao dos Santos , Marcus Vinicius Cisotto, Antonio Cassiano Julio Filho, Luiz Antonio dos Reis Bueno, Ângelo José Augusto Florentino, Antonio Ferreira de Brito, Lincoln Teixeira, Lázaro Aparecido Pires Camargo, Bruno Carneiro Junqueira, Andres Paredes Horna, Jair Gustavo de Mello Torres and Marco Mammoli

Invited Talk: "Space Industry and Small Sats in Czech Republic"
Petr Bareš, Honorary President of the Czech Space Alliance, Czech Republic.

Session 7 - MISSION APPLICATIONS II - Chair: Adolfo Chaves Jiménez, TEC, Costa Rica

IAA-BR-22-07-01 [15:30-15:45]	Lightning Events Simulation Budgeting for the RaioSat Payload On-Board Computer	Lazaro Camargo , Jhonathan Murcia Piñeros, Walter Abrahao dos Santos, Antonio Fernando Bertachini de Almeida Prado, Rodolpho Vilhena de Moraes and Kleber Naccarato
IAA-BR-22-07-02 [15:45-16:00]	A High-Level Synthesis Compressor of Hyperspectral Images based on CCSDS 123.0-B-2	Wesley Grignani, Gabriela Wisbecki, Felipe Viel and Douglas Melo
IAA-BR-22-07-03 [16:00-16:15]	CONASAT-1 Cubesat: Integration of Environmental Data Collector	Alessandra Rodrigues, Alysson Lima, Manoel Carvalho, Samaherni Dias, José Duarte and Jefferson Silva
IAA-BR-22-07-04 [16:15-16:30]	A Model-Based Mission Definition Review: the NANOSATC-BR3 CubeSat Study Case	Giulia Herdies , Nelson Schuch and Eduardo Bürger
IAA-BR-22-07-05 [16:30-16:45]	The CubeSat mission Aldebaran I	Carlos Alberto Rios Brito Junior, Edemar Morsch Filho, José Ribamar Braga Pinheiro Junior, Luis Claudio de Oliveira Silva and Geovaana Maria de Moura Couto

Tutorial 1: "A Simple Onboard Computer for Cubesats with Micropython", Lazaro Camargo and Walter Abrahao, INPE, Brazil

Day 3 - Wednesday, 9 November 2022

Morning

"The Role and Value of Small Satellites for Research and Applications"

Keynote Speaker: JAMES SPANN, NASA Headquarters, USA

PANEL

"Space Law"

Carlos Roberto Duarte Muñoz, Mexican Space Agency, Mexico (Chair)
Chantal Cappelletti, IAA, University of Nottingham, UK
Ian Grosner, AEB, Brazil
Olavo de O. Bittencourt Neto, Universidade Católica de Santos, Brazil

Session 8 - TELECOMMUNICATIONS, TRACKING AND COMMAND - Chair: Walter Abrahao, INPE, Brazil

IAA-BR-22-08-01 [11:15-11:30]	Using Cosmos in nanosatellite testing and at the mission control center	Priscila Yamada, William Silva, Renato Borges and Wilson Yamaguti
IAA-BR-22-08-02 [11:30-11:45]	An Experimental Evaluation of Long-Range Technology in a Stratospheric Sonde for Educational CubeSat Mission Aldebaran-1	Luis Claudio de Oliveira Silva, Jose de Ribamar Braga Pinheiro Junior, Carlos Alberto Rios Brito Junior, Edemar Morsch Filho, Geovaana Maria de Moura Couto Magalhaes, Elias Portugal Fernandes, Antonio Claudio de Sousa Dos Santos Filho, Alex Iury Vieira Almeida, Emanuel Rodrigues Valentim da Silva, Fernanda Sousa de Assuncao Vale, Isabel Silva de Araujo, Jennifer Caroline da Silva Barraza, Julio Cesar Rodrigues Machado, Leonardo Victor dos Santos Sa Menez and Rodrigo Alberto Matos de Carvalho
IAA-BR-22-08-03 [11:45-12:00]	Design and Analysis of a COTS TT&C Subsystem for a CubeSat Imaging Payload mission	Diego W. B. Arruda, Ana Carolina L. Oliveira, Carlos M. Zago and Gabriel A. Coelho

Day 3 - Wednesday, 9 November 2022 - Afternoon

"Amazonia 1 Mission – From Design to In orbit Operation – Technological and System Engineering Gains" Keynote Speaker: ADENILSON SILVA, INPE, Brazil

Session 9 - OPEN SOURCE PLATFORMS - Chair: Carlos Roberto Duarte Muñoz, Mexican Space Agency, Mexico

IAA-BR-22-09-01 [14:15-14:30]	Open-Sourcing of CubeSat Bus for Capacity Building aimed to Acquire Original Space Development Capability	Tetsuhito Fuse, Mengu Cho and George Maeda
IAA-BR-22-09-02 [14:30-14:45]	Development of a Flatsat Platform for GOLDS-UFSC and Future Missions	João Cláudio Elsen Barcellos, Anderson Wedderhoff Spengler, Laio Oriel Seman and Eduardo Augusto Bezerra
IAA-BR-22-09-03 [14:45-15:00]	Prevention and mitigation of the disaster cycle, as causes and effects of climate change, through the use of satellites and IT tools	Bernarda Loretto Sanjines and Mateo Mercado

Session 10 - MISSION APPLICATIONS III - Chair: Maria Cecilia Pereira, UFMG, Brazil

IAA-BR-22-10-01 [15:30-15:45]	UNLP's First CubeSat, USAT-I: GNSS-RO and GNSS-R Technology Demonstrator	Sonia A. Botta, Frida A. Alfaro Rodríguez, Santiago Rodríguez, Elián Hanisch, Marcos D. Actis, David O. Williams Rogers, Simón Lombardozzo, Daniel Hamann, Guillermo Garaventa, Facundo Pasquevich, Gabriel Vega Leañez, Ernesto M. López, Aldana Guilera, Adriana Barba, Santiago Ozafrain, Ezequiel Marranghelli, Mateo Salvo and Agustín Catellani
IAA-BR-22-10-02 [15:45-16:00]	BiomeSat: a Multi-Mission 6U Nanosat for Estimating Forests Health in Brazil	Walter Abrahão dos Santos, Antonio Carlos de Oliveira Pereira Junior, Lincoln Teixeira, Bruno Carneiro Junqueira, Marcus Vinicius Cisotto, Antonio Cassiano Julio Filho, Auro Tikami, Luiz Antonio dos Reis Bueno, Lázaro Aparecido Pires Camargo, Ângelo José Augusto Florentino, Antonio Ferreira de Brito, Andrés Fernando Paredes Horna and Manoel Cardoso
IAA-BR-22-10-03 [16:00-16:15]	The LECX experiment onboard the nanoMIRAX satellite	Joao Braga, Otavio Durao, and Lazaro Carmago
IAA-BR-22-10-04 [16:15-16:30]	Payload-XL: A Case Study of Methodologies for Development and Documentation of Cubesat Subsystems Using ECSS Standards	Márcio Hermany Gomes de Oliveira, Edilberto Costa Neto, Kleber Reis Gouveia Junior, Felipe Viel, Miguel Boing, Gabriel Mariano Marcelino, André Martins Pio de Mattos, Laio Oriel Seman, David Merodio Codinachs and Eduardo Augusto Bezerra

Session 11 - SPACE DEBRIS - Chair: Livio Gratton, UNSM, Argentina

IAA-BR-22-11-01 [16:30-16:45]	Space Debris: Impacts generated by the disposal of CubeSats	Fernanda Vieira and Carlos Eduardo Rosa
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Tutorial 2: "Python and Cubesats", Lazaro Camargo and Walter Abrahao, INPE, Brazil

Day 4 - Thursday, 10 November 2022

Morning

"The IAA's Handbook for Post-Mission Disposal of Satellites Less than 100 kg"

Keynote Speaker: LIVIO GRATTON, UNSM, Argentina

Session 12 - CONSTELLATIONS AND FORMATION FLIGHTS - Chair: Luis Eduardo Loures da Costa, ITA, Brazil

IAA-BR-22-12-01 [10:15-10:30]	Moscow University Constellation of Nano-Satellites for Space Weather and TLE Monitoring	Svertilov Sergey , Bogomolov Vitaly, Zaiko Yurii, Zolotarev Ivan, Iyudin Anatoly, Kalegaev Vladimir, Klimov Pavel, Osedlo Vladislav, Peretyat'Ko Oleg and Petrov Vasily
IAA-BR-22-12-02 [10:30-10:45]	Orbit design analysis for a nanosatellite constellation - Constellation Catarina's case study	Nicole Korres Borges, Rodrigo da Silva Cardozo, Damylle Cristina Xavier Donati and Talita Sauter Possamai
IAA-BR-22-12-03 [10:45-11:00]	Educational and Scientific Project Monitor based on Cubesat Constellation	Vladislav Osedlo , George Antonyuk, Victor Bengin, Vitaliy Bogomolov, Ivan Zolotarev, Vladimir Kalegaev, Oleg Nechaev, Vladimir Radchenko and Sergey Svertilov
IAA-BR-22-12-04 [11:00-11:15]	Introducing SARA Constellation: Satellite for Agriculture and Remote Areas	Felipe de S. N. Coelho and Luis M. C. Acosta

Session 13 - TECHNOLOGY DEVELOPMENT FOR SPACE SYSTEMS - Chair: Paolo Gessini, UnB, Brazil

IAA-BR-22-13-01 [11:15-11:30]	Design and implementation of DC-DC converters for CubeSat in Simulink	Germain Rosadio Vega, Kiara Micaela Rodriguez Bautista, Sheyla Claribel Lozano Burga, John Haile Abad Antialon and Omar Enrique Blas Morales
IAA-BR-22-13-02 [11:30-11:45]	Methodology for developing TT&C subsystems in academic CubeSats	Daniel Curcio Lott Guimarães , Ricardo Luiz Silva Adriano and Maria Cecilia Pereira
IAA-BR-22-13-03 [11:45-12:00]	NumPPTG: a Pulsed Plasma Thrusters Simulation Tool	Fernando Mendes and Paolo Gessini

Day 4 - Thursday, 10 November 2022

Afternoon

"Small Sat Projects of ITA Space Center" - Keynote Speaker: LUIS EDUARDO LOURES DA COSTA, ITA, Brazil

Session 14 - THERMAL SIMULATION - Chair: Laio Seman, UFSC, Brazil

IAA-BR-22-14-01 [14:15-14:30]	Thermal simulation of the CubeSat Catarina-A1	Caique Sales de Miranda Gomes, Edemar Morsch Filho, Laio Oriel Seman, Eduardo Augusto Bezerra and Talita Sauter Possamai
IAA-BR-22-14-02 [14:30-14:45]	Thermal simulation of a high altitude balloon	João Gabriel Barros Marques, João Lucas Caldas dos Santos, Lucas Souza Azulay, Carlos Alberto Rios Brito Junior, Edemar Morsch Filho, José Ribamar Braga Pinheiro Junior and Luis Claudio de Oliveira Silva

Invited Talk: "ASI's Experience in Nano-Satellites", Giancarlo Santilli, UnB, Brazil

Session 15 - ON-BOARD COMPUTER AND EPS - Chair: Alejandro Molinas, Paraguayan Space Agency, Paraguay

IAA-BR-22-15-01 [15:30-15:45]	Simulation of CubeSat on-board computer system operating modes using MATLAB	Jesus Antonio Tapia Gallardo, Omar Enrique Blas Morales, Jhasmin Huillca Alvaro and John Haile Abad Antialon
IAA-BR-22-15-02 [15:45-16:00]	Onboard Computer for a LEO CubeSat Nanosatellite	Camila Barbosa, Samaherni Dias, Kurios Queiroz and Alex Alves
IAA-BR-22-15-03 [16:00-16:15]	Hardware-in-the-loop simulation of an on-board energy-driven scheduling algorithm for CubeSats	Vinicius Bernardo, Laio Seman, Ramon Borba and Eduardo Augusto Bezerra
IAA-BR-22-15-04 [16:15-16:30]	PdQSat Electric Power Subsystem Control using a Discrete Event Systems Model	Elder J. T. Santos, Maria Cecilia Pereira and Patrícia N. Pena

Poster Session - Chair: Moises Souto (IFRN, Brazil)

IAA-BR-22-1P-01	Indirect global monitoring of minimum habitat conditions for the life of bees	Ana Carolina L. Oliveira and Ricardo V. M. Leite
IAA-BR-22-1P-02	MBSE for modeling an Academic Satellite	Bruna Silva Queiroz and Maria Cecilia Pereira

PANEL: Space Education

Closing ceremony