

IAF Space Education and Outreach Symposium

Held at the 76th International Astronautical Congress
(IAC 2025)

Sydney, Australia
29 September - 3 October 2025

Volume 1 of 2

ISBN: 979-8-3313-2945-7
DOI: <https://doi.org/10.52202/083097>

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2025) by International Astronautical Federation
All rights reserved.

Printed with permission by Curran Associates, Inc. (2025)

For permission requests, please contact International Astronautical Federation
at the address below.

International Astronautical Federation
100 Avenue de Suffren
75015 Paris
France

Phone: +33 1 45 67 42 60
Fax: +33 1 42 73 21 20

www.iafastro.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

VOLUME 1

E1.1 LIFT OFF: PRIMARY AND SECONDARY EDUCATION

Additional Practical Classes at the University for Space-Oriented School Students: Experience and Typical Problems	1
<i>Vera Mayorova, Dmitriy Grishko, Victor Leonov</i>	
Assessing the Methods, Impact, and Effectiveness of Satellite-Based STEM Intervention on Primary and Secondary Level in Nepal	8
<i>Sakshyam Pandey, Ira Sharma, Sribin Maharjan Singh, Ashlesha Dangal, Rishav Adhikari, Abhas Maskey, Trishna Shrestha</i>	
Expanding STEM Engagement Through Space Research: The AVA Challenge	18
<i>Ben Newsome, Keira Chrystal, Khushi Daga, David Reynolds, Theodore Tagami, Scott Sleep</i>	
What Does “Space Education” Mean for Teachers?.....	27
<i>Naomi Kagawa, Kohta Tsukawaki, Satoko Nishi</i>	
Empowering the Future: A Program to Inspire Young Girls in Space and STEM.....	34
<i>Esra Sahin</i>	

E1.2 SPACE FOR ALL: PROMOTING INCLUSIVE PRACTICES IN SPACE EXPLORATION

Toward Cultural Competency in Space: Addressing Land Acquisition, Indigenous Rights, and the Need for Inclusive Frameworks in Rocket Infrastructure Development	41
<i>Casey Domingo, Harriet Hurley</i>	
The Sky's No Limit: The Disability Community's Boundless Contributions to Spaceflight.....	48
<i>Sheyna Gifford, Dwayne Fernandes, Jody Greenhalgh</i>	
Making Space Accessible: A Space Education Program for Neurodiverse Students.....	62
<i>Darcey Watson, Sharon Morris</i>	
How a Government Agency Supports the Research, Education, and Workforce Development of a Minority Serving Institution in the United States: Data Results from a Year One Evaluation	75
<i>Tonisha Lane, Shawna Patterson-Stephens, Subramanian Ramakrishnan, Jamel Ali</i>	
Cosmetics : The Making off.....	85
<i>Jacques Arnould</i>	
Mission ShakthiSAT: A 108-Nation Collaborative STEM Initiative for Lunar Exploration	92
<i>Srimathy Kesan, Kshitij Mall, Prathamesh Prabhu, Akash Pandey, Sukruti Narayanan</i>	
Advancing Inclusion in Space: The Australian Space Diversity Alliance’s Mission for a More Equitable Sector	99
<i>Jacqui Tyack, Sheila Gough Kenyon, Eleanor Ingram</i>	
Earth Observation for Environmental Justice in Gaza: Technical, Ethical, and Legal Implications	109
<i>Sahba El-Shawa, Giuliana Rotola</i>	

Inclusive Astronomy Maps: Universal Design for Access to Space	114
<i>Sözer Vurgun, Seda Keskin Vurgun, Taha Arben Vurgun</i>	
Advancing Tribal Nations' Role in U.S. Space Governance	118
<i>Jackie Smith, Alvin D. Harvey, Danielle Wood</i>	
Between Laws and Stars: Regulatory Challenges for the Inclusion of Latin American Talent in the Space Industry	139
<i>Paola Alejandra Zamudio Torres, Jesús Camilo Álvarez Valenzo, Katya Hassel Vázquez Rodríguez, Cecilia Guadalupe Torres Perea, Karla Melisa Vargas Palacios, Guadalupe Montserrat Peralta Mendez, Melina Nava Vivas</i>	
Private Sector Initiatives to Enhance Philippine Space Science Education: A Meta-Synthesis Study.	145
<i>Gene Aaron Osorio, Rizchel Masong, Airene Terry, Alvin Paulino</i>	
Celestial Decolonialism: Indigenous Knowledge as a Catalyst for Astronomical Innovation.....	158
<i>Kashish Makhija, Gita Naderi</i>	

E1.3 ON TRACK: UNDERGRADUATE SPACE EDUCATION

ILEWG LUNEX EMMESI EuroMoonMars Earth Space Innovation 2023-24 Highlights: Moon Missions, Data, Instruments, Field Work, Astronauts, Habitats & Business	174
<i>Bernard Foing</i>	
AI, Humanities, and Communication: New Frontiers for Educating Prospective Space Professionals	176
<i>Kayla Taylor, Edward Miller</i>	
An Updated Analysis of Mexican STEM Students Motivations Post-Pandemic	191
<i>Cecilia Guadalupe Torres Perea, Jesús Camilo Álvarez Valenzo, Karla Melisa Vargas Palacios, Dafne Paola Urbina Arreguin, Fatima Vidal Rojas, Paola Alejandra Zamudio Torres, Melina Nava Vivas, Katya Hassel Vázquez Rodríguez, Guadalupe Montserrat Peralta Mendez, Oscar Damian Garcia Aguirre</i>	
Candy Thrust and Beyond: Advancing Space Outreach through Student Led Initiatives in India	204
<i>Kaashvi Kakkar, Aman Jaiswal, Kartik Kharbanda, Akhil Thindi, Srikaustubh V Kothapalli, Abhay Kishor Tripathi, Cris Varshith Dj, Navya Sharma, Aarav Harshvardhan, Lanka Sachit</i>	
CSAT: Integrating Hands-On CubeSat Development into Undergraduate Education for STEM and Leadership Skill Enhancement.....	217
<i>Maaheen Zulfiqar, Rehan Mahmood</i>	
From Class to Space: A Capstone Course for 4th Year Space Engineering Students	224
<i>Xiaofeng Wu, Jiashu (George) Wu, Julian Guinane, Xueliang Bai, Patrick Oppel, Iver Cairns</i>	
Cultivating Skills for Realizing Diverse Satellite Missions in Undergraduate Students Through Collaborative 2U CubeSat Development Between Universities.....	232
<i>Kentaro Kitamura, Hirokazu Masui, Shuji Abe, Teiji Uozumi, Mariko Teramoto, Akiko Fujimoto, Akimasa Yoshikawa, Mengu Cho</i>	
The Australian Rover Challenge – Teamwork Does Make the Dream Work	240
<i>David Harvey, John Culton, Miles Davies</i>	
Using CANSATs for Space-Themed STEM Education - ESA Standard Vs. Bespoke Configurations	246
<i>Michael Johnson</i>	

The Bachelor of Space Science Degree at RMIT University, Australia	254
<i>Gail Iles, Brett Carter</i>	

E1.4 IN ORBIT: POSTGRADUATE SPACE EDUCATION

Space Medicine Within Medical Education: Survey Findings from Recent Australian Medical School Graduates.....	263
<i>Daniel Heng-En Wo, Henry Feng</i>	
Bridging the Gap: Practical Application in Space Law Education for Future Practitioners	276
<i>Lauren Bydalek</i>	
The CyberPro Train Programme: A Scalable Vocational Model for Enhancing the European Cybersecurity Space Ecosystem.....	281
<i>Valerio Roscani, Lorenzo Scatena, Eleonora Lombardi</i>	
The Pink Rover Initiative: Launching the Next Generation of Space Innovators	286
<i>Chloe Chang, Mietta Levingston, Larissa Carbery, Jared Landau, Tash Lee, James Pettifer, Ashika Ramaswamy, Chao Chen</i>	
OCULUS - A Unified Visual Solver for Optimal Control Problems Via Indirect Methods	321
<i>Luigi Mascolo</i>	
ATHENE: Autonomous Terrain Handling and Environmental Navigation Experiment – an Interdisciplinary Education Project on Mobile Robotics for Space Exploration at the University of Stuttgart	333
<i>Moritz Gewehr, Phillip Wolff, Finn Hansen, Mathis Leonhardt, Yazan Al Rifai, Mike Narr, Prateeksha Angadi, Ruben Hohly, Tom Jacob, Yasmin Ben Rajiba, Cyrus Jackson Dhara, Yazan Rifai, Sabine Klinkner</i>	
EssentialSAT: Lessons Learned from a Space Systems Engineering Learning Laboratory	348
<i>Jerry Sellers, John Paffett, Amanda Winters, Shannon Kimball</i>	
The Space Station Design Workshop as a Platform for Students to Develop a Large-Scale Human Spaceflight Mission Concept.....	358
<i>Anastasia Natascha Bonidis, Claas Olthoff, Gisela Detrell, Lina Salman, Tharshan Maheswaran</i>	
AbGrad Japan: A Conference Made by Students for Students to Increase Cooperation in Japan and Asia Pacific.....	365
<i>Fatima Li, Selene Cannelli, Courteney Monchinski</i>	
ARCSSTEE: Providing Postgraduate Space Education for Africa as a Strategic Tool for Sustainable Development	373
<i>Felix Buba, Seyi Olatoyinbo</i>	

E1.5 ENABLING THE FUTURE: DEVELOPING THE SPACE WORKFORCE

Scaling Morocco's Space Ambitions: Public-Private Partnerships as a Catalyst for Workforce Development	381
<i>Iliass Tanouti</i>	

Enhancing Emotional Intelligence for Project Success to Maximize Collaboration Etiquette in 21st-Century Global Space Involvement.....	393
<i>Farah Diya Yasmine, Aaron Dobo, Anseea Popescu, Aysha Alharam, Onur Yörükoglu, Sourabh Kaushal, Zamara Rodriguez</i>	
Beyond Technical Expertise: Real-World Experience Advancing Space Workforce Development Through Vertical Leadership and Hands-On Training.....	410
<i>Julie Chesley, Jerry Sellers, Bruce Chesley, Bassam Alfeeli</i>	
Ladakh Launchpad: A Decade of Training the Next Generation of Explorers in Science, Engineering and Mission Planning in a High-Value Terrestrial Analogue Region.....	418
<i>Siddharth Pandey, Jonathan Clarke, Annalea Beattie, Chris McKay, Sanjoy Som, Jennifer Blank, Rakesh Mogul, Sudha Rajamani, Parag Vaishampayan, Kavya K. Manyapu, Rosalba Bonaccorsi, Mehnaz Jabeen, Javier Martín Torres, Sunil Kumar</i>	
Empowering Taiwan's Future Space Workforce: Taiwan Space Generation as a Youth-Led Model for Interdisciplinary Engagement	429
<i>Andie Wang, Tzu Yu Lin, Mengwei Lin, Yushun Wang, Roger Tsai</i>	
Impact of ARCSSTE-E's Capacity Development Efforts in Space Science Technology Education Within the Anglophone African Countries	438
<i>Oladosu Olakunle, Seyi Olatoyinbo, Abdul-Rahman Adegbite</i>	
Hands-On S&MA Training with Embedded Anomalies Using HEPTA-SAT: A Rapid-Intensive Program to Accelerate Global Space Workforce Development.....	446
<i>Masahiko Yamazaki, Nagisa Sone, Tsuyoshi Nakagawa, Toru Kasai</i>	
SpaceKind - Jedi Training for the Space Community	453
<i>Alex Karl, Milica Milosev, Loretta Whitesides</i>	
Academia Meets Industry: A Framework for Sustainable Space Innovation	458
<i>Najam Naqvi, Aqsa Zouq, Usama Ahmed, Umaima Khan, Daniyal Raza Kazmi, Muhammad Aqib Khan</i>	

E1.6 CALLING PLANET EARTH: LARGE ENGAGEMENT AND COMMUNICATIONS INITIATIVES

Bringing Space Closer: A Proposal for a Citizen-Led Space Media Platform in Japan Inspired by NASA Social	470
<i>Ayako Kuroono, Yoko Watanabe, Takae Yamaguchi, Ayumu Tokaji</i>	
Astronaut Challenge: Analog Astronaut Training Simulation as an Accessible Method of Insertion into the Aerospace Area to the General Public	483
<i>Gabriela Quirós, Fabiana Chaves</i>	
Harnessing Exhibit Data from an Australian Interactive Science Centre to Explore Public Attitudes Toward Permissible Space Activities.....	491
<i>Madeline Parks, Nate Taylor, Isabella McCulloch, Georgia Dallimore, Amber Pegoli, Siavash Tabatabaei, Kerrie Dougherty, Teegan Duke, Georgia Bowden</i>	
Leveraging Social Media and Digital Influencers to Enhance Space Awareness in Developing Countries	506
<i>Mj Akter</i>	

Why Everyone Will Want to Go to Space: Communication Techniques and Long-Term Strategies to Make Outer Space a Widely Desirable Experience	522
<i>Chiara Limardi</i>	

E1.7 SENDING OUT A SIGNAL: INNOVATIVE OUTREACH AND COMMUNICATIONS INITIATIVES

Analog Missions as a Catalyst for Inclusive Space Outreach: Hypatia Mars	531
<i>Laura Gonzalez, Laura Gonzalez Llamazares, Ariadna Farres</i>	
Promoting Analog Space Missions Through Students for the Exploration and Development of Space Philippines (SEDSPH) Upskills Group Mentorship Program.....	537
<i>Kristine Jane Atienza, Mark Angelo Purio, Jessica Jamimah Lopez, Iyarra Sheine Subade, Erika Shania Valencia, Paul Anton Mahinay, Pauline Dela Torre, Rizzsa Lou Castillo, Mark Gil Ivan Tejoso, Gian Carlo Torres, Lovely Andeo</i>	
Scaling Space Outreach: The Role of Podcasts and Short-Form Media in Reaching Non-Traditional Audiences	545
<i>Brenden Swanik</i>	
Democratising Space Science: The Australian Lunar Experiment Promoting Horticulture (ALEPH) Mission	550
<i>Anay Ashwin, Clare Feeney, Jenna McCarthy, Jacqueline Carpenter, Jeffrey Xu, Paul Millett, Veena Nair, Madeleine Bandurski, Lauren Fell</i>	
The Use of National Volunteering Programs to Generate Space Communication Methods and Shape Public Opinions; Learnings from the Astra Program in Australia	561
<i>Luke Basile, Kelly Chen, Saif Elderini, Claudia Ghosn, Marnie Kenderes, Aarsh Mehta, Sepehr Saryazdi, Angela Sojan, David Travica, Georgina Coddington</i>	
From Earth to Orbit: ASTROBEAT's Interdisciplinary Approach to Space Exploration and Public Engagement	575
<i>Leonardo Barilaro, Matteo Marciano</i>	
From Players to Protectors: Gamification for Public Space Safety Awareness	582
<i>Simon Burgis, Stephan Jacob, Tim Flohrer, Reinhold Bertrand</i>	

E1.8 SHOW US SPACE: DEMONSTRATION OF HANDS ON EDUCATION AND OUTREACH

An Effective Tool for Space Awareness: Hands-On Activity with Tardigrades	592
<i>Akin Karahasan</i>	
Virtual Reality Development for Visualization of Large, Complex Systems in Aerospace Teaching Applications.....	605
<i>Mollie Johnson, Andy Eskenazi, Olivier De Weck</i>	
Expanding Space Education: Engaging Local Communities Through Interactive VR Experiences (Lumarnity VR)	614
<i>Takuya Yokoyama, Toshikazu Miyashita, Kiho Fukaura, Miho Masugi, Yoshitoki Tanaka, Soichi Mori, Koki Ogawa, Shunsuke Sugimura, Naoki Hayashi, Masahiro Katayama</i>	

VOLUME 2

Self-Sufficiency in a Lunar Habitat in a Community — Ursa Minor Interstellar Citizen (UMIC) Lunar Farm	621
<i>Chris Yi Yuan, Amy Wang, Yingtong Shen, Louis Li, Yuxuan Wei, Leon Li, Han Bao</i>	

E1.9 SPACE CULTURE: NEW PROCESSES OF PUBLIC ENGAGEMENT IN SPACE THROUGH CULTURE AND ART

Prose at Perihelion: Poetry as a Medium for Space Accessibility, Visibility, and Inclusivity	633
<i>Kayla Taylor, Jennifer Wojton, Cassandra Branham</i>	
Pale Blue Dot: An Interdisciplinary Mobile Game on Space for Sustainability	642
<i>Martine Joy Irog, Kenneth Angelo Julio, Casey Domingo</i>	
Traditional Performing Arts in Delivering Space Education: A Case Study in Malaysian Society	649
<i>Ahmad Syukran Mohd Idris</i>	
Celestial Adornments: Integrating Space and Local Constellations into Maldivian Traditional Jewelry	651
<i>Aishath Mohamed Rasheed, Raushan Ali Firaq</i>	
Heritage Space Food: Preserving Culinary Culture for Extended Missions	658
<i>Newton Campbell, Dalia (Mareen) David, Stephanie Wan</i>	
The Cosmic New Materialisms Reading Group: A Cosmic Collective Cartography	676
<i>Jennifer Crouch, Melanie King</i>	
Filling the Space Gap: The National Library of Australia and the Women in the Space Industry Project	690
<i>Louise Whelan, Bronwyn Ryan</i>	
Astronomy in the Aymara Culture	699
<i>Georgina Chavez, P. Miguel Machicado, Joel Dastin Duran Paredes, Sarah Arteaga</i>	
Implementing a Rural Revitalization Project to Turn My Hometown, Komono Town, into a “Space Town	708
<i>Hikaru Otsuka, Taichi Yamazaki</i>	
Connecting the Community: Novel Approaches to Space Education	730
<i>Harriet Hurley, Casey Domingo</i>	
Catalyze the Public Imagination with Science Fiction Exhibition: A New Pathway for Space Culture and Education	737
<i>Chen Yu, Zhiyong Fu</i>	
Task Eternal: A Major New Aerospace Exhibition at Powerhouse Parramatta, Co-Curated with Industry and Community	745
<i>Lisa Haviilah, Agatha Gothe-Snape, Sarah Rees, Jaklyn Babington, Beau James, Ceridwen Dovey</i>	
Carlos Noriega: The First and Only Peruvian Astronaut’s Legacy in Space Exploration and Its Impact on Future Generations	756
<i>Rivaldo Carlos Duran-Aquino, Angela Tarazona Torres, Sheccid Orihuela Arias</i>	

Establishing a Culture of Drinking in Space: Realizing a Beer Experience in Space Equivalent to that on Earth	764
<i>Taiko Kawakami, Taichi Yamazaki</i>	

Beyond the Blue: Pakistan's First Space-Themed Short Film Initiative for Space Outreach and Awareness.....	786
<i>Najam Naqvi, Momina Asif, Umaima Khan, Usama Ahmed, Muhammad Aqib Khan, Shoaib Sultan</i>	

E1.10 LEARNING BY DOING: EXPERIENTIAL AND SIMULATION-BASED LEARNING

A Gamified Web Platform for Aerospace Education in Peru: A Pilot Study for Secondary and Undergraduate Students.....	792
<i>Frank Raul Quintana Quispe, Victor Raul Huaman Simeon</i>	

Democratizing Space: How Citizen-Led CubeSat Projects in Japan Promote Inclusion in Space Development	797
<i>Ayako Kuroko</i>	

Implementing Can Satellite and Rocket Competition to Bolster Space Education in the Philippines	805
<i>Jeremy Bajado</i>	

QL-Sat: A Malaysian CubeSat Educational Kit for STEM Programme.....	817
<i>Noor Nadia Azmah Binti Hamsha, Nurul Huda Abd Rahman, Izham Izzat Ismail, Abdul Hazim Abd Ghafar, Najihah Abd Razak, Nur 'Ain Najlaa Zazuzila, Muhammad Izzul Aiman Mohd Basri, Muhammad Hanafi Azami, Salamah Mohamad, Zarina Mohamad, Law Bing Haw, Mohamad Amirul Muhammad, Mohd Ismail Khamis, Mohammad Juani Sujana, Muhammad Hasif Bin Azami</i>	

Slippers2Sat Middle School CubeSat Project: Empowering Nepal's Marginalized Youth for a Spacefaring Future.....	822
<i>Rishav Adhikari, Sangam Thapa, Anjali Dhami, Sajjan Duwal, Kriti Dahal, Prem Bahadur Rana, Trishna Shrestha, Hari Ram Shrestha, Abhas Maskey</i>	

Starlab ExpertLink - Intersecting Global Space Experts with Pre-College Classrooms in a Sustainability-Themed Space Station Design Challenge.....	836
<i>Howard Greene, Abigail Harrison</i>	

Gamifying CubeSat Knowledge: Learning Lessons for Avoiding the Kessler Cascade.....	844
<i>Brian Yecies, Anthony McKnight, Li Qiao, David Reynolds</i>	

E1.1P INTERACTIVE PRESENTATIONS - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM

Leveraging Generative AI for Space Education and Public Engagement.....	851
<i>Ayako Kuroko</i>	

Launching the Space Workforce: A Framework for the Urgent Need of the US Commercial Space Sector.....	855
<i>Beatriz Coningham, Saba Hussain</i>	

Launching Futures: Powerhouse Academy Space Programs for K-12 Students	870
<i>Sophie Poisel</i>	

Integrating Earth Observation into Climate Change Education	876
<i>Ravil Mursalov, Gunel Valiyeva</i>	
Integrated Teaching of Chemistry with Space to Secondary School Students	882
<i>Gamza Yahyayeva</i>	
Global Youth Space Challenge: Uniting Young Minds for a Singular Space Objective.....	888
<i>Arda Kagan Mentes, Yasin Yetgin, Asta-Adji Sadou, Cabbar Gokbey Goksen</i>	
From Passion to Proficiency: How Our Team Transforms Undergrad Enthusiasts into Aerospace Engineers.....	894
<i>Zofia Antkowiak, Karolina Zabczynska</i>	
Fostering Diversity in Space Exploration: Addressing Barriers and Enhancing Opportunities for Underrepresented Groups.....	900
<i>Ali Hasanli, Rahil Aghabayli</i>	
Enhancing the Common Goal of Space Exploration by Bridging Disciplines	903
<i>Nana Gordon, Kristin Shahady</i>	
SciAccess: Best Practices for Accessibility in Space Education and Outreach	910
<i>Caitlin O'Brien, Anna Voelker, Sheila Xu</i>	
Incidence of Low Patronage of Space Science Education in Ghana	915
<i>Francis Kudjoe</i>	
Affordable Robotics for Space-Themed STEM Outreach in Irish Primary Schools	925
<i>Michael Johnson</i>	
Space Renaissance Event: Expanding Humanity to Outer Space (EHTOS)	935
<i>Ghanim Alotaibi, Maria Moukarzel, Sakhaa Almadani, Dalia Alrudaini, Adriano V. Autino, Bernard Foing, Marie-Luise Heuser, Werner Grandl, Jerry Stone</i>	
Empowering the Next Generation of the Space Workforce Through Targeted Scholarships and Industry Internships.....	938
<i>Daniel Sors Raurell, Josep Colomé, Paula Lomascolo Pujadó, Albert Nicolás López</i>	
Bringing Space to Your Community: Contextualising Space Technologies for the Benefit of Local Communities	943
<i>Darcey Watson, Sharon Morris</i>	
Three-Year Experience and Follow-Up of the Space Career Mentoring Program for University Students by the Korea Public Institute.....	951
<i>Mi-Jin Yoo</i>	
The Role of Space Organisations in Expanding Multi-Disciplinary Engagement.....	956
<i>Shae Ingram, Chia Tian-Brearne Chen, David Reynolds</i>	
The ARC Centre of Excellence Plants for Space: Growing a Future in Space and on Earth.....	970
<i>Frazer Thorpe</i>	
The International Pre-University Space Program (IPSP)	978
<i>Axel Núñez Arzola, Itzcoatl Francisco Nuñez San Miguel, Carlos Duarte</i>	

Sustainable Space Workforce Development – Training Future Engineers for Space Technologies (ASTRAIOS).....	983
<i>Ehsan Zabihian, Christie Maddock, Reham Al Tamime, Maria Nepheli Kardassi, Silva Kerkezian, Irene Pantelaki, Heidi Budd Thiemann, Yolla Al Asmar, Mariana Belgiu, Raian Vargas Maretto</i>	
The FOCUS Program and Development of Space Launch Vehicle Technology Education.....	994
<i>Cheulwoong Kim, Byoungjik Lim, Yoonokyung Seo, Woongrae Roh</i>	
Seeds of Discovery: ExoLab's Global Inquiry Pedagogy Connecting K-12 Students with Space Research	1004
<i>Theodore Tagami</i>	
Breaking Barriers: Advancing Diversity, Equity, and Inclusion in the Australian Space Workforce	1009
<i>Jacqui Tyack, Keira Chrystal</i>	
Hamilton Secondary College Space School - A Space Education Leader	1017
<i>Sarah Baker, Mike Roach, Peta Kourbelis</i>	
Advancing Space Education Through the Zero Robotics High School Program	1023
<i>Alissa Chavalithumrong, Scott Dorrington, Dinuri Rupasinghe, Danielle Wood</i>	
Approach to the Development and Operation of the Doctoral Centre for Rocketry, Research, Teaching, and Training.....	1030
<i>Krzysztof Bzdyk</i>	
Chasqui II in Action: Promoting Space Education in Peru Through STEAM.....	1037
<i>Angela Maritza Naveda Cosquillo, Ruth Juliana Balarezo Obispo, Katherine Koo Saenz, Ariadna Celeste Pillaca Llanos, Alex Aldhair Medina Navarro, Jairo Alejandro Solano Delgado, Michael Vincent Quispe Mendoza, María Quintana</i>	
Combining Satellite Data and Public Safety in Space Education.....	1049
<i>Marcin Giza</i>	
Cosmic Narratives: ARC Centre of Excellence in Plants for Space (P4S) Innovations in Community Engagement in Space Research	1052
<i>Frazer Thorpe</i>	
Democratizing Space Education Through Gamification	1063
<i>Shameer Zeeshan</i>	
Empowering the Future of Space: The Vital Role of Young Professionals in Innovation, Peacebuilding, and Sustainability.....	1069
<i>Miriam Opazo Mendez, Marcos Eduardo Rojas Ramirez, Kieran Wagstaff, Isha Parvaiz, Diego Sanchez De Lerin, Renata Prôa</i>	
Empowering the Next Generation: Insights from the ACHIEVED Competition Supporting Students and Young Space Professionals	1076
<i>Maria Casanovas Crespo, Serena Campioli, Marcos Eduardo Rojas Ramirez, Nishanth Pushparaj, Faith Tng</i>	

E1.IPB INTERACTIVE PRESENTATIONS - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM

From the Classroom to the Stratosphere: Inspiring High School Students Through the EXPLORA Balloon Program in the Arctic	1081
<i>Armelle Frenea-Schmidt, Marie Lambert, Henrik Pettersson</i>	
SatKit: A Novel Educational Satellite Development Platform for Enhancing Earth Observation and Climate Monitoring Capabilities	1088
<i>Abdullah Alsalmani</i>	
Grow Your Food! Using ‘Sensory Play’ in Space-Based Educational Outreach to Understand Children's Eating Behaviours	1092
<i>Lisa Newman, Julia Low, Lauren Fell</i>	
Emma-Chan Light: A Hands-On Educational CubeSat Model with Morse Code LED Communication	1096
<i>Ayako Kuroko</i>	
Inspiring Ethical Minds: Integrating Space Exploration Ethics into Early-Stage Education.....	1100
<i>Winnie Tang</i>	
Space Careers Wayfinder - A National Online Space Careers Program for High Schools	1110
<i>Robert Hollow, William Flynn, Celine D'Orgeville</i>	
A Data-Driven Approach to Inclusion in Space and STEAM: Women and Indigenous Representation in Tlaxcala, Mexico	1113
<i>Celia Chavez Virgen</i>	
Empowering Education: Implementing CanSat Courses for Children to Foster Early Engagement in Space Technology.....	1120
<i>Avid Roman-Gonzalez, Natalia Indira Vargas-Cuentas</i>	
SEDSPPH Upskill Group: Empowering Filipino Students in Space Engineering Education Through Satellite Development and Data Processing	1125
<i>Mark Angelo Purio, Lovely Andeo</i>	
Space Awareness in Smart Tourism Evolution	1133
<i>Giacomo Primo Sciortino</i>	
Relaunching an Integrated Undergraduate Business, Law and Politics Space Topic	1143
<i>Joel Lisk</i>	
From Class to Orbit: The NottSpace Approach to Undergraduate Space Education.....	1148
<i>Luis Cormier, Sedat Izcan, Nishanth Pushparaj, Jeremy (Jez) Turner, Chantal Cappelletti</i>	
Empowering the Next Generation: The Impact of the POLSA Student Council on Poland's Space Academia Ecosystem (2020–2025).....	1160
<i>Karol Kolacz, Maciej Piórkowski, Maciej Kuczynski, Kaja Strójwas, Cezary Kolodziejek, Martyna Maria Czudec, Armin Ernst, Filip Andula, Zuzanna Dybcio, Hanna Grechuta, Oliwia Pajak</i>	
MELIORA: The Seed to Interconnect South America Space Community	1174
<i>Julia Alvarez Vallero</i>	

Space Gurion Empowering the Next Generation: A Student-Led Approach to Space Workforce Development	1184
<i>Ben Haimoff, Yuval Erez, Roni Lavi, Dana Gavish, Shimrit Tirosh Maman</i>	
Lessons from the Traveler IV: A Blueprint for Advancing University-Led Aerospace Projects in Latin America	1191
<i>Rivaldo Carlos Duran-Aquino, Katherine Koo Saenz, Rodrigo Augusto Martinez Chavez</i>	
Mapping the Global Landscape of Aerospace Conferences: A Focus on Latin American Engagement and Outreach.....	1202
<i>Natalia Indira Vargas-Cuentas, Avid Roman-Gonzalez</i>	

E1.LBA LATE BREAKING ABSTRACTS (LBA)

Sari Competition and International Cooperation for Educational and Technological Development.....	1207
<i>Matheus Guedes, Victor Baptista, Rafael Lobo, Leonardo Souza, Gabriel William Boente Lima</i>	
Space Challenge: A Mission-Based Educational Model for Satellite Systems Training in Brazilian Public Schools	1213
<i>Leonardo Souza, Rafael Lobo, Victor Baptista, Matheus Six</i>	
Design and Development of a Low-Cost Semi-Autonomous Lunar Rover as an Educational Platform for Space Systems Training	1218
<i>Fidel Castro Suazo, Juan Contreras, Raúl Gianmarco Chávez Chávez, Alejandro José Agapito Quiñones, Juan Salvador Palacios Bett</i>	
Design of a Modular Educational CubeSat as a Tool for Aerospace Engineering Education in Peru	1228
<i>Juan Salvador Palacios Bett, Johan Flores Torres, Fidel Castro Suazo, Andres Zelada, Julio César Casquero Zaidman</i>	

Author Index