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INCREASING STUDENT INTEREST AND ENGAGEMENT IN SPACE EXPLORATION CONFERENCE

BRINGING SPACE INTO THE
CLASSROOM AS A GATEWAY TO STEM



FASESA
FUTURE AFRICAN SPACE EXPLORER'S STEM ACADEMY



INCREASING STUDENT INTEREST AND ENGAGEMENT IN SPACE EXPLORATION CONFERENCE

INTRODUCTION

Space exploration is an emerging global megatrend and recent developments in space travel may be setting the stage for a striking new era of Space Exploration. As evidenced by the recent leaps and strides in space exploration by the likes of Sir. Richard Branson, Elon Musk, and Jeff Bezos, space exploration is an expanding vocation that will provide vast socio-economic benefits to a nation.

FASESA understands that cultivating an interest in space exploration begins at a young age. Through introducing the vocation to children, then guiding and equipping them with the resources and skills to explore the subject further, will greatly increase a nation's ability to produce thought leaders in the field, who will form the basis of future space programs

ABOUT THE CONFERENCE

The Conference offers a great opportunity to the African teachers, administrators, education officials, and students to get acquainted with the Space exploration in the curriculum, and each other. Space education experts sharing new teaching methodologies with African institutions will make a long-lasting connection. This unique event will serve as a model, transferable to other K-12 institutions and lead to deep space contributions and societal engagement from future space leaders.

This event will bring together teachers, administrators, managers, students, and our space education experts to discuss current challenges and innovative solutions for Increasing Student Interest and Engagement in Space Exploration.

This event will offer teachers a first-hand opportunity to learn about how space exploration in the curriculum is important in early childhood education and beyond

CONFERENCE

- Participants will gain an understanding of the skills that can be taught to students that translate to future real-world career success in space. These include space engineering concepts, and teamwork capabilities, as well as interpersonal skills like service, communication, leadership, and civic engagement.
- Teachers will understand how to introduce new space-based lessons directly in classroom settings to impact an even greater number of students.
- Administrators and education officials will learn how to introduce career planning to parents and students that will impact the space pipeline when students choose space as a major.
- Participants will gain skills that translate to future real-world career success in space. These include space preparedness and teamwork capabilities as well as interpersonal skills like service, communication, leadership, and civic engagement.

CONFERENCE AIM

The teachers and students need to know and understand what the Space Science Sector is and the career opportunities it offers. "Space" does not mean they have to be an Astronaut. The impressive development of Space Applications gives immense opportunities to those who study IT, Agronomy, Biology, Chemistry, Nutrition, Geography, Medicine, Law, Management, Communications, Electronics, Physics, and so on



INCREASING STUDENT INTEREST AND ENGAGEMENT IN SPACE EXPLORATION CONFERENCE



DAY 1

Who should attend? -Teachers, Principals, Ministry of Education, Ministry of science and technology officials' and Space Agency representatives

TOPICS:

- 09:00** Introducing space exploration in the classroom
- 10:00** How children learn about space, & what their conceptions of space exploration are?
- 11:00** Data at Your Fingertips: The Use of Citizen Science in a Variety of Classroom Contexts
- 11:30** Use of model satellite-CanSat in applied teaching of satellite technology.
- 12:00** Teaching coding and Cybersecurity using robotics
- 13:00** Lunch
- 14:00** Robotics use in Middle grades
- 15:00** "Build Your Own" hands-on STEM projects
- 16:00** End of Conference



DAY 2

Who should attend? -Teachers, Principals, Ministry of Education, Ministry of science and technology officials' and Space Agency representatives

TOPICS:

- 09:00** Entrepreneurship and Aerospace
- 09:30** How to organize a space career day at your school?
- 10:00** How to integrate space projects into your classroom
- 11:00** Why is space so important?
- 12:00** Space Scholarships, internships, and more
- 13:00** Lunch
- 14:00** Improvement of girls' auto confidence in STEM areas since early childhood
- 15:00** Policies and strategies
 - National policies and strategies
 - Regional cooperation
 - Multi-stakeholder initiatives
 - International collaboration and cooperation
- 16:00** End of Conference



INCREASING STUDENT INTEREST AND ENGAGEMENT IN SPACE EXPLORATION CONFERENCE



DAY 3

Who should attend? Students, Teachers & career guidance counselors

TOPICS:

09:00 HUMAN SPACE FLIGHT

09:30 SPACE CAREERS

Introduction to the immense career opportunities the space sector offers

10:00 ROCKET SCIENCE

Intro to Rocket Science and Technology

How does a Rocket Fly?

How do I become a Rocket Scientist?

11:00 SATELLITE SCIENCE

Introduction to Satellite Technology

How do we Launch a Satellite?

How do I become a satellite engineer?

12:00 ASTRONOMY

What is Astronomy?

How Do I Become an Astronomer?

The Formation, and History of Observable Planets

13:00 LUNCH

14:00 SPACE ROBOTICS

Intro to Space Robotics

Key technologies in Robotics and AI for space

Current and future space missions and opportunities

15:00 ASTROBIOLOGY

What is Astrobiology?

Life and Its Origin & Distant Worlds!

How do I become an Astrobiologist?

16:00 End of Conference

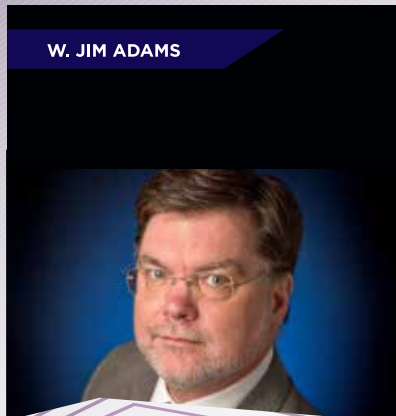


FASESA
FUTURE AFRICAN SPACE EXPLORER & STEM ACADEMY

INCREASING STUDENT INTEREST AND ENGAGEMENT IN SPACE EXPLORATION CONFERENCE

SPEAKERS

W. JIM ADAMS



CEO, Jim Adams World SA (Pty) Ltd.
NASA Deputy Chief Technologist, Retired
Keynote Speaker

PROF. ELIZABETH HENNING



Professor of Educational Linguistics
Department of Childhood Education
University of Johannesburg

RUWIMBO SAMANG



CNN Women Shaping African Space
Space Law & Policy Analyst
Top 10 Under 30 African Space Industry
CEO-Founder
AgriSpace

PROF. MOLLY SIMON



Assistant Professor
School of Earth and Space Exploration
Arizona State University

PROF. DR. ALIM RUSTEM ASLAM



Professor of Aerospace Engineering
Manager, Space Systems Design and Test Lab
Dept. of Astronautical Engineering
Faculty of Aeronautics and Astronautics
Istanbul Technical University

PROF. PAULINE MOSELY



Associate Chair & Full Professor
Department of Information Technology
Pace University

PROF. CHRISTINE ANNE ROYCE



Past President (18-19), National Science
Teaching Association
Professor of Teacher Education and
Co-Director of MAT in STEM Education
Shippensburg University

DR. MNCEDISI TRINITY DEWA



Senior Lecturer - Industrial Engineering
School of Mechanical, Industrial and
Aeronautical Engineering
University of the Witwatersrand

HIROKO TSUZUKI



Administrator for the Space Education Center
Japan Aerospace Exploration Agency

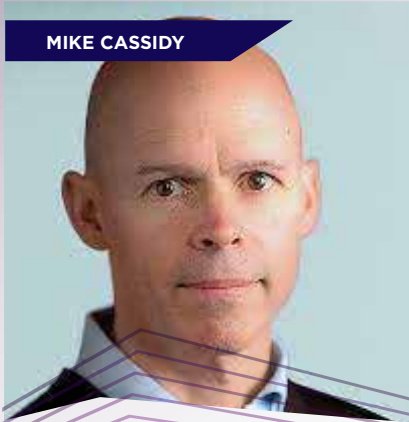


FASESA
FUTURE AFRICAN SPACE EXPLORATION STUDY ACADEMY

INCREASING STUDENT INTEREST AND ENGAGEMENT IN SPACE EXPLORATION CONFERENCE

SPEAKERS

MIKE CASSIDY



VP of Product Development
Project Leader on Project Loon
Astra

PROF. ILEANA MARIA GRECA



Director of a Consolidated Research
Unit in the area of Education
University of Burgos

DR. GORDON FARQUHARSON



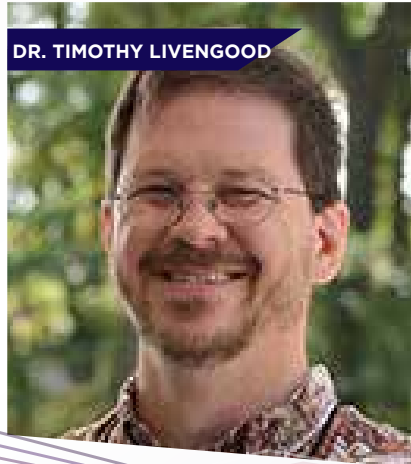
Director of Radar Systems
Capella Space

MATTHEW VOSS



Chief Operation Officer
NearSpace Launch, INC

DR. TIMOTHY LIVENGOD



Research Scientist
Center for Research in Earth and Space
Science and Technology
NASA Goddard Space Flight Center

ZIED TAYEB



Founder
NeuroRobotics Researcher
NASA ITech Innovator
NeuroTech & Space Robotics
Myelins

PROF. DANTE LAURETTA



Regents Professor, Lunar and Planetary
Laboratory
Principal Investigator, OSIRIS-REx Asteroid
Sample Return Mission
University of Arizona

DR. CHRISTINA CARMEN



Founder and CEO
The Talon Company

PROF. YANG GAO

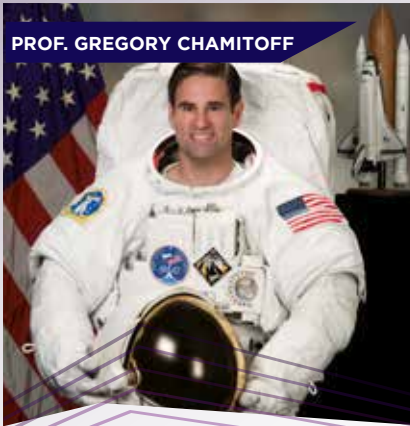


Professor of Space Autonomous Systems;
Wiley JFR Editor-in-Chief; United Nations
Space4Women Mentor
Surrey Space Centre,
University of Surrey

INCREASING STUDENT INTEREST AND ENGAGEMENT IN SPACE EXPLORATION CONFERENCE

SPEAKERS

PROF. GREGORY CHAMITOFF



Former NASA Astronaut
Space Station Flight Controller
Aerospace Engineer
Professor of Engineering Practice, Aerospace Engineering
Director, AeroSpace Technology, Research & Operations
(ASTRO)

PROF. OLGA KOSHELEVA



Co-Chair Department of Teacher Education.
Director STEM Education Division –
The University of Texas at El Paso

PILAR GONZALEZ



Doctoral student in the STEM strand of the Teaching,
Learning, and Culture
University of Texas at El Paso (UTEP)



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REGISTRATION FEES

SCHOOLS



IN PERSON

3 CONFERENCE TICKETS	✓
FREE BREAKFAST, LUNCH & SNACK	✓
EASY ACCESS	✓
CERTIFICATE	✓
STUDENTS ATTEND DAY 3 FOR FREE (VIRTUALLY)	✓

R 8 000

VIRTUAL

5 CONFERENCE TICKETS	✓
FREE BREAKFAST, LUNCH & SNACK	✓
EASY ACCESS	✓
CERTIFICATE	✓
STUDENTS ATTEND DAY 3 FOR FREE (VIRTUALLY)	✓

R 5 000

REGISTRATION FEES

PRIVATE OR GOVERNMENT INSTITUTIONS



IN PERSON

2 CONFERENCE TICKETS	✓
FREE BREAKFAST, LUNCH & SNACK	✓
EASY ACCESS	✓
CERTIFICATE	✓
STUDENTS ATTEND DAY 3 FOR FREE (VIRTUALLY)	✓

R 12 000

VIRTUAL

4 CONFERENCE TICKETS	✓
FREE BREAKFAST, LUNCH & SNACK	✓
EASY ACCESS	✓
CERTIFICATE	✓
STUDENTS ATTEND DAY 3 FOR FREE (VIRTUALLY)	✓

R 8 000



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COMPANY DETAILS

COMPANY : _____
ADDRESS : _____
CITY : _____
PHONE : _____



DELEGATE DETAILS

Note: Please provide information as you wish to appear on your name badge and certificate of attendance.

1. FULL NAMES : _____
DESIGNATION : _____
EMAIL : _____
2. FULL NAMES : _____
DESIGNATION : _____
EMAIL : _____
3. FULL NAMES : _____
DESIGNATION : _____
EMAIL : _____
4. FULL NAMES : _____
DESIGNATION : _____
EMAIL : _____

TERMS AND CONDITIONS

By Completing this Registration form the delegates accept the terms and conditions as stated on the form.

1. Full Payment must be received prior to the event date. Alintacorp reserves the right to refuse entry into the event should full payment not have been received prior to this date. Cancellation will be charged under the term set out below.

2. Cancellations, No shows & Substitutions: Cancellations received in writing more than 21 days prior to the event being held carry a 50% cancellation fee. Should cancellations be received between 21 days and the date of the event, the full event fee is payable and non – refundable. Non- payment or non-attendance does not constitute cancellation. No show will be charged the full registration fee. Cash alternatives will not be offered, however, substitutes at no extra charge are welcome.

3. Alterations to advertised package: FASESA reserves the right to alter this programme without notice or penalty and in such situations no refunds or part – refunds or alternative offer will be made. Should FASESA permanently cancel an event, for any reason whatsoever, the Client shall be provided with a credit voucher of the equivalent amount paid towards the cancelled event. In the case of a postponed or cancelled event, Fasesa will not be responsible for covering airfare, accommodation, or other travel cost incurred by Clients.

4. Copyright: All intellectual property rights in the materials distributed by FASESA in connection with this event are expressly reserved and any unauthorized duplication, publication or distribution is prohibited.

METHOD OF PAYMENT : BANK TRANSFER

OUR BANKING DETAILS:

NAME: ALINTACORP PTY LTD
BANK: STANDARD BANK
A/C: 221500766

BRANCH: 001255
SWIFT CODE: SBZAJJ
Quoting Invoice number as reference