

INTERNATIONAL ACADEMY OF ASTRONAUTICS

IAA 1st Symposium on STEM / STEAM for Space

March 25, 2016
Paris, France

PROGRAM

08:30 AM

Welcome coffee

09:00 AM

Opening remarks:

Secretary General, IAA
Dr. Jean-Michel Contant

Chair, First IAA STEM/STEAM Symposium
Prof. Dr. Liya Regel

Session 1

Chair: **Dr. Giovanni Maizza**

09:10 AM

IAA-STEM-16-01-01 - **A Model for Enhancing STEM and Space Education in
Underserved Students**

Julia Clark

Program Director in the Division of Research on Learning in Formal and Informal Settings at
the National Science Foundation, USA

09:40 AM

IAA-STEM-16-01-02 - **The Mars Lab: An innovative and multidisciplinary integration of space engineering and science research with a self-sustaining space education and outreach project**

Carol Oliver, Brett Biddington

Australian Center for Astrobiology School of Biological, Earth and Environmental Sciences
University of New South Wales, Kensington, AUSTRALIA

10:10 AM

IAA-STEM-16-01-03 - **On the Application of STEAM Principles in Space Project Design**
Wesley L. Harris

Massachusetts Institute of Technology, Cambridge, USA

Coffee break:

10:30 AM

11:00AM

Session 2

Chair: **Dr. Jordi L. Gutiérrez**

IAA-STEM-16-02-01 - **Partnering for success in STEM education and innovation: a statewide university system and a national laboratory.**

Stacey S. Patterson

Associate Vice President for Research, The University of Tennessee and Vice President,
UT Research Foundation, USA

11:30 AM

IAA-STEM-16-02-02 - **From Leonardo da Vinci to future STEAM education for Space**
Giovanni Maizza

Department of Applied Science and Technology, Center Director Politecnico di Torino,
Torino, ITALY

12:00 AM

IAA-STEM-16-02-03 - **Best practices in STEM/STEAM education at the Mexican Space Agency**

Carlos Duarte

Deputy Director General for Space Education Agencia Espacial Mexicana, MEXICO

12:15 PM

Lunch

Session 3

Chair: **Dr. Stacey S. Patterson**

01:30 PM

IAA-STEM-16-03-01 - **Creativity as integration: A crucial shift from STEM to STEAM**
Guy Boy

Florida Institute of Technology and NASA Kennedy Space Center, USA

02:00 PM

IAA-STEM-16-03-02 - **Femtosatellites for Space Education**

Jordi L. Gutiérrez, Pilar Gil-Pons

Department of Physics, Universitat Politècnica de Catalunya, SPAIN

02:30 PM

IAA-STEM-16-03-03 - **Emerging STEM/STEAM and Space: Lessons learned from the FP7 project "ICARUS" – an SAR project with an innovative dissemination and public outreach strategy**

Norbert Frischauf, Philippe Carous, Stephane Ourevitch, Almudena Velasco

Rodriguez, SpaceTec Partners, and **Geert de Cubber**, Royal Military Academy of Belgium, BELGIUM

03:00 PM

IAA-STEM-16-03-04 - **Nurturing Creativity in Youth to Improve STEM Education for the Space 4.0 Era**

Oleg Ventskovsky

Director, Yuzhnoye Design Office European Representation in Brussels, UKRAINE

03:15 PM

IAA-STEM-16-03-05 - **STEM Education for Space in Italy: Girls can do it**

Amalia Ercoli Finzi

Dipartimento di Scienze e Technologie Aerospaziali, Ingegneria Aerospaziale, Politecnico di Milano via La Masa, Milano, ITALY

03:30 PM

Coffee break:

Session 4

Chair: **Mr. Norbert Frischauf**

03:45 PM

IAA-STEM-16-04-01 - **Integrating Arts with STEM Education - The Indian Perspective**

Radhika Ramachadran

Space Physics Laboratory, Vikram Sarabhai Space Centre, INDIA

04:00 PM

IAA-STEM-16-04-02 - **The study of Russian literature should be included in the training of physician-cosmonaut**

Vassily Loginov, Elena Yu. Bytchkova

Faculty of Basic Medicine, Lomonosov Moscow State University, Moscow, RUSSIAN FEDERATION

04:15 PM

IAA-STEM-16-04-03 - **A proposal for a Space Engineering B.Sc. at the Universitat Politècnica de Catalunya**

Jordi L. Gutiérrez, Pilar Gil-Pons

Department of Physics, Universitat Politècnica de Catalunya, SPAIN

Discussion

Moderator : Dr. Phillippe Arbeille

Unite Medicine & Physiologie Spatiales- Faculte de Medicine, Tours, FRANCE

Adjourn