

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

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THE "SPACE FOR ALL NATIONS" INITIATIVE: TOWARDS MORE EQUITABLE AND DIVERSE
ACCESS TO SPACE

Abstract

This work intends to impart the efforts that have been carried out by the Space For All Nations [1] (SFAN) outreach initiative, an International Institute for Astronautical Sciences (IIAS [2]) effort established in 2019. The SFAN mission "Space for good and for all" embraces the space industry as an international collaborative arena that transcends national and cultural differences. The IIAS hosts immersive astronautics educational programs focused on aeronomy, space suit evaluation, flight test engineering, geosciences, microgravity research, and operational sciences (including space medicine). The institute comprises over 260 researchers and scientists including veteran astronauts, engineers, flight surgeons, pilots, mid-career professionals, and senior executives. Research teams have access to five high fidelity facilities for scientific discovery, 11 active space agency, academic, private, and institutional partners, and have successfully deployed experiments to the International Space Station. Emerging space nations have much to offer in fulfilment of their ambitions as well in the establishment of their space exploration programs while supporting international cooperation dialogue. With over 52 countries represented in the IIAS, the SFAN initiative was established to ensure underrepresented communities can fully contribute their ideas, find fellowships, publish research, access testing facilities, develop curriculum, or create online education exchange sessions. The SFAN team connects emerging space nation partners to space agencies, technical experts, researchers, advisors, mentors, champions, and academic teams. A structured memorandum of understanding is set in place so that partners can conduct science, education, and research together. Countries currently collaborating with the SFAN initiative include Portugal, Qatar, Egypt, Bolivia, Canada, and Guatemala. Negotiations are underway to include Brazil, Indonesia, Senegal, Ghana, Zambia, South Africa, and Indigenous and First Nations communities. Together partners are curating a future based on mutual respect, access, and limitless innovation. Impact efforts include:

- Over 120 online STEM and space webinar events conducted by or with IIAS expert colleagues including for audiences in Saudi Arabia, Brazil, Mexico, Indonesia, France, Norway, and Canada;
- Several experiments now progressed in test readiness level;
- Two research papers in review for publication with Acta Astronautica.

This session will offer SFAN reflections, lessons, and progress in addressing equitable and inclusive space education and outreach programs – ultimately offering a replicable model.

[1] + info: <https://astronauticsinstitute.org/about/sponsored-outreach-programs/>

[2] + info: <https://astronauticsinstitute.org>