Paper ID: 26839 oral

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Poster Session (P)

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THE ROLE OF SPACE IN STEM EDUCATION AND OUTREACH

Abstract

Fifty years after the start of the Space age, Space is definitely part of everyday life, with an ever increasing number of Earth-orbiting satellites providing indispensable services, a space station permanently crewed and many more robotic missions exploring other distant planets and the universe beyond. But how do we maintain this momentum? It is now widely recognized that the developed world, particularly Europe and the USA, is not producing sufficient scientists and engineers to sustain the current rate of growth. There is now a critical need to improve education in science, technology, engineering and maths (STEM) and 'Space' is the ideal medium to do just this.

Space is limitless as are the possibilities of using Space in education. Space is all inclusive, it covers all science disciplines, design, technology, engineering, mathematics and the humanities such as geography, history, law, social science and even art and literature. Space motivates, inspires and raises aspirations. Leveraging on the interdisciplinary aspects of astronautics and space exploration it can increase STEM interest by offering new avenues of experimentation and discussion. It can provide explanation, encourage innovation and, above all, keep the dream of exploration alive.

Having reformed its Education and Outreach Committee in 2012, the British Interplanetary Society (BIS) has been active in both the education and outreach areas and has encouraged its new branches, both in the UK and in Europe to be pro-active too. The result has been amazing. BIS-Italia, its Italian branch, has straight away recruited a team of space professionals and enthusiasts to attend and run education and outreach events and to go into universities and schools. It now also supports ESA/ESRIN in many of its outreach activities. Meanwhile back in the UK, all three of the BIS' regional branches have been running highly successful 'Space Days' and lectures, while the Society itself is currently preparing a proposal to the Department for Education for a Space Science and Technology Course for 16 to 18 year olds.