IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Sending out a Signal: Innovative Outreach and Communications Initiatives (7)

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EMPOWERING COMMUNITY SPACE EDUCATION & OUTREACH WITH THE SETI INSTITUTE & A GLOBAL NETWORK OF CITIZEN SCIENTISTS

Abstract

In an era where space sciences are advancing rapidly, the importance of educational outreach and public participation cannot be overstated. After all, space science should be presented to the world as not something exclusionary, but something inherently inclusive. We will present the innovative approach taken by the SETI Institute which utilizes a global network of telescopes operated by citizen scientists to democratize space science and foster a deeper connection between the general public and the cosmos. Our network, comprising individuals with Unistellar telescopes, has contributed significantly to the field of astronomy through the confirmation of several exoplanets — including two discoveries made directly by these citizen scientists, one in collaboration with 16 high school students — the observation of comets, asteroids, spacecraft, and a record number of observations of the nearest supernova in a decade.

Beyond these scientific achievements, our initiative's core lies in its outreach efforts. Citizen scientists have taken active roles in their communities, conducting outreach that spans collectively observing events like the annular and total solar eclipses of October 2023 and April 2024, to participating in public talks and live streams. Many observers are also educators or professional astronomers, who work with the SETI Institute to develop educational and outreach efforts within their locales through programs like the Unistellar College Astronomy Network or Astronomers Without Borders. This grassroots approach has significantly enhanced SETI outreach, making space science as a whole more accessible and engaging for a broader audience.

Our work showcases the power of non-traditional outreach in cultivating a community of informed enthusiasts capable of furthering both scientific knowledge and public interest in space. By equipping network participants with comprehensive tools such as a community website and app, as well as the necessary astronomy knowledge to conduct their outreach, we extend the reach of space education beyond formal settings to foster a sense of ownership and participation in space science.

We will detail the various methods used to attract and engage a diverse group of participants, the results of our efforts as evidenced by both levels and types of participation, and the lessons learned through this unique model of science communication and education. We believe that our experiences can offer valuable insights for the international space community, emphasizing the role of innovative outreach strategies in enhancing public understanding and support of space exploration.