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IAA-PDC-15-P-93 THE PLANETARY SOCIETY NEO EDUCATION AND COMMUNICATION PROGRAM

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Introduction

As part of its mission to empower the world's citizens to advance space science and exploration, The Planetary Society works to educate and engage the public about Near Earth Objects (NEOs) and the NEO threat. The Society is pursuing strategies to significantly expand NEO-related education and public engagement activities, leveraging inspiring voices, compelling stories and best communications practices for today's audiences and media landscape. The Society empowers people worldwide to know the cosmos and our place within it.

Celebrating 35 years since its founding, The Planetary Society is an international non-profit organization and the world's largest space interest group. Founded by Carl Sagan, Bruce Murray, and Louis Friedman, The Society helps connect the public to the space community. In its new 2014-2017 Strategic Plan, The Planetary Society slates a key initiative to engage the public in space exploration and the goal to help defend Earth against hazardous asteroids. These two strategic priorities come together in The Society's NEO public education and communication program.

Established NEO Communication Methods

By combining the right ingredients for effective outreach – compelling stories, facts, educational information and popular voices delivered through today's effective outreach methods – The Society pairs best science with communications best practices to advance its mission and NEO focus. Through its robust multimedia channels, The Society reaches millions of people across the world. This broad audience is engaged through rich storytelling, information sharing and vibrant personalities, including Bill Nye (the Science Guy), CEO and popular science educator. The Society reaches its audiences through a variety of media, including: video, print, web, radio, and social media.

Planetary Society NEO public communication efforts include:

(1.) Blogs: The Society hosts blogs and guest blogs on its popular website http://planetary.org (with more than 300,000 web users per month). Blogs (http://planetary.org/blogs) allow public-friendly, timely NEO topic coverage that includes in-depth education and information resources. Social media is leveraged to alert widespread audiences to blog-based NEO coverage, enabling curious readers

to learn more and participate in online dialogs with authors and fellow global community members. The Planetary Society blogs include regular coverage of NEO-related topics, news, and special events by popular experts like Emily Lakdawalla, Senior Editor and Planetary Evangelist, and Bruce Betts, Director of Science and Technology. Guest blogs, including those featuring NEO mission principal investigators and NEO scientists, are hosted on The Society's popular website. Planetary Defense Conference attendees and other NEO scientific community experts can share NEO-related news on The Planetary Society website as guest bloggers.

(2.) Radio: Planetary Radio, The Society's weekly radio program (http://planetary.org/radio), frequently covers NEO topics, including interviews with members of the NEO science community, and the Planetary Defense Conference itself. Planetary Radio airs on more than 100 radio stations and is available online as a podcast. Hosted by Mat Kaplan, the radio program includes events recorded before live audiences, including PDC public events.



PDC 2013 public event panel

- (3.) Public Events: The Planetary Society engages the public at special events, including at Planetary Defense Conferences and Planetary Radio Live events. Products from events, including Planetary Radio and video programs, expand the reach of event-related news and information to many thousands of people worldwide.
- (4.) Social Media: The Society educates the public about NEO topics through today's leading social media platforms. The Society's social media presence reaches more than 6 million followers combined on Twitter, Facebook, Instagram, YouTube and Google+. Society leadership and staff accounts have tens of thousands to millions of followers, including Bill Nye (@TheScienceGuy), Emily Lakdawalla (@elakdawalla), and Bruce Betts (@RandomSpaceFact). Social media enables significant reach to publicize the NEO threat and NEO news on a global scale, and it offers platforms to link to more in-depth NEO coverage by The Planetary Society and other organizations and news entities.
- (5.) College Curriculum: Dr. Bruce Betts' online college course Introduction to Planetary Science and Astronomy (http://planetary.org/bettsclass) educates students about NEOs and the NEO threat. The course is taught through California State University Dominguez Hills but is free and accessible to the public worldwide via live online classes and video archives. Excerpts can be used as standalone pieces to complement classroom curriculum.



Online Introductory Astronomy class includes significant discussion of NEOs and the NEO threat

- (6.) Magazine: *The Planetary Report*, The Society's quarterly member publication, includes focus on NEO topics, including articles written by NEO scientists.
- (7.) Science and Technology Project Education: NEO education is part of reporting on Society NEO sponsored projects such as Shoemaker NEO Grants (http://planetary.org/neogrants) and research into the Laser Bees deflection technique (http://www.planetary.org/neogrants) Regular reporting on these projects and updates from the participants provide more opportunities to talk about the NEO threat and what is being done about it.
- (8.) Global Volunteer Network: One of The Planetary Society's greatest NEO education and public outreach assets is its ever-expanding global volunteer network. With outreach coordinators and volunteers based in countries around the world, The Society has cultivated a worldwide community that comprises otherwise disparate space fan communities in diverse geographic regions. In addition to online and social media channels, this network offers a conduit for key NEO threat and mitigation communications by reaching people through their immediate communities.

Expanding NEO Education & Outreach: Video & Planetary TV

As part of its 2014-2017 Strategic Plan priority to maximize public engagement and education, The Planetary Society has increased focus on the proven public engagement opportunities associated with video. By investing in in-depth video production plans, capacity and staff, The Society's video offerings have expanded to include multiple channels and programs, as featured online on Planetary TV (http://planetary.org/tv). Among other programs, the SciTech channel offers a hub for The Society's NEO-focused work and involvement in events like the PDC. These public outreach videos also appear on YouTube, Facebook, and other channels, reaching a robust following of members, space fans and the public through today's preferred methods.



Bill Nye talks about near Earth asteroids in a Planetary Society video

Videos include:

- the popular new Random Space Fact series (http://planetary.org/rsf) that combines facts with humor and graphics. NEO information is and will be regularly incorporated into some of these minute-long videos.



Bruce Betts and Star Trek *Voyager* actor Robert Picardo talk about near Earth asteroid Eros in a Random Space Fact video

- a brief video about the Planetary Defense Conference that will be produced from PDC 2015
- video derived from the PDC 2015 public event (full video of the PDC 2013 event is online)
- brief interviews with NEO related individuals, including Shoemaker NEO Grant winners.

- a video introduction to the NEO threat, currently in planning. Nominally, the video will outline the basic nature of the NEO threat, and what is being done about it, in about 15 minutes.



Bruce Betts discusses the average number of car sized asteroids that hit Earth's atmosphere per year

Conclusion

Educating the public about the NEO threat in accurate, engaging ways can create a realistic sense of the level and nature of the threat, while simultaneously garnering public support for NEO-related research. By approaching public education across a variety of today's proven communications methods, The Planetary Society increases the scope of global public outreach to educate and empower millions. From longtime space enthusiasts to the general public, a diverse array of audiences can be reached through sound public outreach strategy, cutting-edge media channels, and inspiring voices, stories and engagement opportunities.