15€ AMERICAN MUSEUM & NATURAL HISTORY

Media Inquiries: Scott Rohan, Department of Communications

212-769-5973; srohan@amnh.org

www.amnh.org

October 2019

WORLDS BEYOND EARTH, A NEW HAYDEN PLANETARIUM SPACE SHOW, PREMIERES JANUARY 21, 2020, AT THE AMERICAN MUSEUM OF NATURAL HISTORY

ACADEMY AWARD WINNER LUPITA NYONG'O TO NARRATE

A STUNNING EXPLORATION OF WORLDS THAT SHARE OUR SOLAR SYSTEM BASED ON THE LATEST DISCOVERIES





Featuring immersive visualizations of distant worlds, groundbreaking space missions, and breathtaking scenes depicting the evolution of our solar system, the American Museum of Natural History's new Hayden Planetarium Space Show <u>Worlds</u>

<u>Beyond Earth</u>, will open January 21, 2020, as part of the Museum's 150th anniversary celebration. Worlds Beyond Earth takes viewers on an exhilarating journey that reveals the surprisingly dynamic nature of the worlds that orbit our Sun and the unique conditions that make life on our planet possible.

Academy Award winner **Lupita Nyong'o** has signed on to narrate *Worlds Beyond Earth*. Nyong'o's acclaimed film work includes *Us* (2019), *Black Panther* (2018), *The Jungle*

Book (2016), *Star Wars: Episode VII - The Force Awakens* (2015), and **12** *Years a Slave* (2013), for which she won the Academy Award for Best Supporting Actress. She is also the narrator for the six-part wildlife docuseries *Serengeti* (2019).

Worlds Beyond Earth is produced by a team that includes Earth and planetary scientists, science visualization experts, and artists, and was developed using data from sources such as SPICE (Spacecraft Planet Instrument C-matrix Events) — the system used by NASA and other space agencies for designing and documenting solar system exploration missions. With brilliant visualizations shown on the world's most advanced planetarium projection system, Worlds Beyond Earth whisks viewers away on an adventure across the solar system, from our planetary cousins Mars and Venus to beyond the asteroid belt, where worlds of ice and gas like Saturn, Jupiter, and their moons reveal active volcanoes and buried oceans.

While humans have not yet ventured beyond the Moon, *Worlds Beyond Earth* celebrates the extraordinary Age of Exploration carried out by robotic explorers over the past 50 years. With each probe and spacecraft launched into the unknown, gathering data and sending it back to Earth, scientists have discovered the surprisingly dynamic, active, and varied nature of the worlds that share our solar system, gaining a deeper understanding of the uniqueness of our home planet in the process. How is the icy surface of Jupiter's moon Io—located 800 million kilometers from the Sun—volcanically active? What is the atmosphere like on Saturn's moon Titan, where showers of liquid methane pelt the surface? In stunningly detailed scenes drawn from real data—including unparalleled visualizations of the alien landscape of Mars and a simulation of the evolution of Saturn's rings—*Worlds Beyond Earth* takes viewers on a remarkable journey around our solar neighborhood to explore whether there really is no place like home.

Worlds Beyond Earth is part of the Museum's 150th anniversary celebration, which officially began in March 2019 and includes a series of events, programs, and exhibitions inspired by the Museum's legacy of scientific exploration and science education, including the role of the historic Hayden Planetarium in bringing the latest space science to the public. First built in 1935 and named for philanthropist Charles Hayden, the world-famous facility has transported generations of New Yorkers — and their children and grandchildren— to the edges of the observable universe, revealing mysterious cosmic phenomena and nurturing their

curiosity about the magnitude and workings of our universe. The new Space Show is dedicated to the memory of Charles Hayden and opens during the 150th Anniversary of the year of his birth.

Worlds Beyond Earth is rendered in 8K and will be the first Museum Space Show to fully utilize the world's most advanced planetarium projection system, installed this year in the Hayden Planetarium. The first-of-its-kind high-dynamic range (HDR) system displays the widest color gamut of any planetarium in the world, allowing visitors to experience both the darkness of outer space and the most colorful worlds as never before.

Worlds Beyond Earth is curated by Denton Ebel, curator in the Museum's Department of Earth of Planetary Sciences and chair of the Division of Physical Sciences, who specializes in the study of meteorites, and directed by Carter Emmart, the Museum's director of astrovisualization and one of the original team members of the NASA-funded Digital Universe and OpenSpace projects, which are continuing to redefine how planetarium theaters present science to the public through immersive data visualization.

Worlds Beyond Earth is produced by Vivian Trakinski, who directs the Museum's science visualization program, and documentary filmmaker Gavin Guerra. Rosamond Kinzler, senior director of science education and co-director of the Museum's Master of Arts in Teaching program, is the executive producer.

Natalie Starkey, a science communicator and geologist who served as co-investigator for science on the European Space Agency's Rosetta mission Ptolemy instrument, wrote the script. The score is by **Robert Miller**, a New York City composer who wrote the music for five previous Museum Space Shows.

Worlds Beyond Earth is the sixth Space Show since the opening of the Rose Center for Earth and Space in 2000, which premiered the first Space Show, Passport to the Universe narrated by Tom Hanks, the same year. Previous Space Shows have included The Search for Life: Are We Alone? (2002), narrated by Harrison Ford; Cosmic Collisions (2006), narrated by Robert Redford; Journey to the Stars (2009), narrated by Whoopi Goldberg; and Dark Universe (2013), narrated by Neil deGrasse Tyson, the Frederick P. Rose Director of the Hayden Planetarium.

Worlds Beyond Earth was created by the American Museum of Natural History,

the Frederick Phineas and Sandra Priest Rose Center for Earth and Space, and the Hayden Planetarium.

Worlds Beyond Earth is dedicated to the memory of Charles Hayden in celebration of the 150th anniversary of his birth and made possible by the generous support of the Charles Hayden Foundation.

OpenSpace is based upon work supported by NASA under award No. NNX16AB93A. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Aeronautics and Space Administration.

ABOUT THE AMERICAN MUSEUM OF NATURAL HISTORY (AMNH)

The American Museum of Natural History, founded in 1869 and currently celebrating its 150th anniversary, is one of the world's preeminent scientific, educational, and cultural institutions. The Museum encompasses 45 permanent exhibition halls, including those in the Rose Center for Earth and Space plus the Hayden Planetarium, as well as galleries for temporary exhibitions. It is home to New York State's official memorial to Theodore Roosevelt, a tribute to Roosevelt's enduring legacy of environmental conservation. The Museum's approximately 200 scientists draw on a world-class research collection of more than 34 million artifacts and specimens, some of which are billions of years old, and on one of the largest natural history libraries in the world. Through its Richard Gilder Graduate School, the Museum grants the Ph.D. degree in Comparative Biology and the Master of Arts in Teaching (MAT) degree, the only such free-standing, degree-granting programs at any museum in the United States. Annual on-site attendance has grown to approximately 5 million, and the Museum's exhibitions and Space Shows can be seen in venues on six continents. The Museum's website, digital videos, and apps for mobile devices bring its collections, exhibitions, and educational programs to millions more around the world. Visit **amnh.org** for more information.

Follow

Become a fan of the Museum on Facebook at <u>facebook.com/naturalhistory</u>, or visit <u>twitter.com/AMNH</u> to follow us on Twitter.

###

<u>Images</u> (left to right):1) Academy Award Winner Lupita Nyong'o (©Nick Barose),2) Early rendering of a data visualization from *Worlds Beyond Earth* depicting Jupiter's invisible magnetic field (©AMNH)

No. 68