NASA/JPL Solar System Ambassador Program

September 6

THE JAMES WEBB SPACE TELESCOPE: UNFOLDING OUR COSMIC HISTORY

The greatest origin story of all unfolds with the James Webb Space Telescope. Launched on December 25, 2021, Webb is NASA's premier space science observatory. It will take us even further into cosmic history than the storied Hubble telescope and help answer the question of where we came from.

Webb will fundamentally alter our understanding of the universe. It can observe all of the cosmos, from planets to stars to nebulae to galaxies and beyond – helping scientists uncover secrets of the distant universe as well as exoplanets closer to home. Webb can explore our own solar system's residents with new detail never before seen and search for faint signals from the first galaxies ever made.

September 13

HOW THE UNIVERSE WORKS

The Universe is stranger than fiction. Building on the Big Bang presentation, this one will take us from the "birth" of the Universe to its final days. Topics include how stars are born and die, their internal processes, and how they have contributed to everything the Universe has. This includes how we humans are really made from star dust. You will learn everything you want to know about black holes but were afraid to ask.

What is the Universe made of? Are there parallel universes where carbon copies of us exist? Learn about the cosmic battle that will determine the fate of our Universe. And, discover why the Universe is a dangerous place.

September 20

DID THE BIG BANG REALLY HAPPEN?

The Big Bang has been proposed as one theory about the beginning of our Universe. During this presentation we will discuss the theories on what banged, why it banged, and what was there before the bang. We will also cover other theories that have been postulated for how we got everything from seemingly nothing, whether multiple universes exist, and what the future holds for the universe we inhabit.

September 27

EXOPLANETS : IS THERE LIFE OUT THERE?

Ever since humans first gazed into the night sky, the question of whether we are alone in the Universe has remained unanswered. The Universe is 13.8 billion years old yet the "Observable Universe" is 92 billion light years across. One would think that statistics dictate that with a Universe that vast and with one planet teeming with life (Earth) that some form of life exists out there. If so, is it intelligent and what does it look like? Is it in our own backyard, i.e. Mars, and moons in our Solar System. And, where are they? What was Stephen Hawking's warning? And finally, should humans become a multi-planet species?

Travel to the far reaches of the Universe and see that fact can be stranger than science fiction.

October 4

BLACK HOLES

The existence of black holes has been theorized for more than 200 years. Initially just a philosophical idea, there is now strong evidence that most, if not all galaxies contain black holes millions or billions of times more massive than our Sun. Black holes themselves cannot be observed since, by definition, no light can escape them, but astronomers can study the effects of black holes on their surroundings.

What are black holes? How do they form? How can they be studied if nothing can escape them? What is at the bottom of them – parallel universes, time travel, or something else?
In this presentation we will take a journey to a black hole and explore what we would see and feel including how to be "spaghettified."

October 11

APOLLO TO ARTEMIS

As we prepare to return to the Moon in 2025, we will relive the excitement and adventure of the Apollo program that brought humans to another world. Learn about how the Apollo program was a masterpiece of engineering and courage in the days when technology was in its infancy. Apollo continued in the footsteps of history's great explorers and left an incredible legacy.

The Artemis program will continue Apollo's legacy of exploration. It will bring a diverse crew to the Moon and, sometime in the 2030s, to Mars. We will discuss the program and how it will accomplish those goals.

October 18

ALL ABOARD FOR MARS

Come with us on a journey to Mars and hear about the latest discoveries of our terrestrial neighbor made by NASA. Did life once exist there and is there life now? Could our ancestors have hitched a ride from Mars to Earth on a comet? It's possible. Mars was once wet and had an atmosphere that could support primitive life forms.

Our rover, Perseverance, is in search of bio-signatures. One of its goal is to find evidence of life, past and present. It's helicopter, Ingenuity, is the first craft in history to actually take flight on another celestial body. Our hopes are high that clues to life will be uncovered.

Come aboard for a ride to Mars.

October 25

OUR SOLAR SYSTEM

Our solar system has 8 planets (sorry Pluto), 5 dwarf planets, 181 moons, and 552,894 asteroids. That's just part of the solar system. Further out are the Kuiper Belt and the OORT cloud.

How and when did our solar system form? Well, much of what we have today are the survivors of an ancient demolition derby. We may be standing on the second version of Earth. And, did you know that the planets were not always in the same order as they are today and that Saturn saved the Earth?

We will also learn what Einstein said that gravity is and how the planets and moons stay in orbit.