Einstein, A Stage Portrait
by Willard Simms
Directed by Wayne Brinda
November 13, 2020 - Live streamed at 8:00 PM ET
Recorded streams thru November 20, 2020

The mission of Prime Stage is to entertain, inspire and enrich through professional theatre by bringing literature to life.
Dear Families, Students and Educators,

We are pleased to bring you Einstein, A Stage Portrait by Willard Simms, the second exciting production in our 2020-2021 Prime Online Season. In the one-person show actor Matt Henderson brings to life the wit, personal, and deeply human side of this genius and reluctant celebrity who changed forever the way we look at the universe. For the safety to our patrons, we are presenting Prime Online with plays that you can watch online from your home, your classroom or anywhere!

All literature produced by Prime Stage is always drawn from middle and secondary Reading Lists and themes are in the current Pennsylvania curriculum.

This Resource Guide is designed to provide background and context, classroom or home activities and content to help you enliven your students’ experience with the literature and the theatre. We encourage you to use the science experiments and activities, to spark personal connections with the story and discoveries of Albert Einstein.

If you have any questions about the information or activities in the guide, please contact me and I will be happy to assist you, and I welcome your suggestions and comments!

Linda Haston, Education Director & Teaching Artist
Prime Stage Theatre
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The activities in this guide are intended to enliven, clarify and enrich the text as you read, and the experience as you watch the literature.
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Einstein, A Stage Portrait

About the play
Albert Einstein has invited the audience to his house to finally set the record straight about who he really is. He was not a Godless communist, and is assuredly NOT the Father of the atomic bomb, as has been claimed! This one-actor play reveals the deeply human side of the great genius, the reluctant celebrity who changed forever the way we look at the universe.

Variety said: "The importance of the play is the easy way the audience comes to view the complexities of a man who committed his entire life to science. . .Simms lightens the burden of a one-man show by writing dialogue full of wit, humor, and one-liners. . .telling, through a string of anecdotes, Einstein's metamorphosis from a bored high school dropout to the winner of the Nobel Prize. . .” Along with his wit, the play has at its heart the anguish Einstein faced when forced to choose between morality and science as he shares the letters received, memories of his son and family, and his love of music, especially Mozart.

Willard Simms, playwright, is the author of 11 published plays, 14 produced teleplays, and two television mini-series. His play "Wright From America", won the Juneteenth National Playwriting Competition in Louisville, Kentucky. He is the author of "POE!", which won the Maltese Falcon Award from the Mystery Writers of America. His one person play, "Einstein: A Stage Portrait", played Off Broadway at the American Jewish Theatre, has been produced all over the world, and was shown on USA television. Mr. Simms is an expert in biographical drama and included in his television work are scripts on Albert Einstein, Leonardo da Vinci, George Washington, Benedict Arnold, and a Mini-series on the life St. Francis of Assissi. "Bye Bye Blackbird", his script about the life of 1920's flapper queen Zelda Fitzgerald made virtually every Critics Pick list at the Edinburgh Fringe Festival. Writing awards include the Mystery Writers of America, the Shubert Foundation, the University of Louisville, the University of Oklahoma, the Telluride Theatre Festival, Drama-Logue, and the Colorado Authors League.
Q & A with the director, Wayne Brinda
Wayne Brinda is the director for Prime Stage Theatre’s production of Einstein, A Stage Portrait. Wayne co-founded Prime Stage with his wife, Connie, in 1996 and serves as Producing Artistic Director.

There are quite a few plays about Einstein, tell us why Prime Stage chose to do Einstein, A Stage Portrait. What makes this particular play unique?
I was looking for a one-actor script that has been successfully produced and is true to Einstein. I love how Willard Simms, the playwright, blends historical accounts, with Einstein's passions for his work, his love for his son, his love of music - especially Mozart, and his humor. It has been a pleasure talking with the playwright about the script to fit our Prime Online format.

With all that is happening in the world right now, what can a show about Albert Einstein teach us?
I think Einstein says it best - "God never tells us in advance whether the course we are to follow is the correct one. So, I do not fear being wrong. And often I am. It is enough for me to try and humbly comprehend the smallest part of the intelligence manifested in nature. To gaze in rapturous amazement at the harmony of natural law. And to remember that morality is the greatest endowment of mankind. And, of course, music."

How has the preparation and rehearsal process been going? Could you share a little bit about the process of rehearsing over zoom?
It is always a pleasure to work with Matt. He is doing an amazing portrait of Einstein. We have a terrific artistic team to bring Einstein to life. This includes the technicians at Hear Corps where we will do the live stream and recorded streams of the production.
We were delighted to secure Lisa Bansavage as our Dialect Coach and Dramaturg. Lisa’s experiences on several television shows and on stage that includes one-woman shows, has been invaluable. She works very closely with Matt through Zoom rehearsals. Not only with the dialect, but his speech pattern, laugh, physicality, and even finding a teacher to help him learn to play the violin.
We also have Brian Ceponis, an actor who has performed several times with Prime Stage, as our video director. He has done and continues to do several film and television shows. He will direct the cameras. Working with Zoom has been interesting, but I love the in-person rehearsals we are also doing - with just Matt and I and our Stage Manager is joining us via Zoom.

I also had a wonderful phone chat with Dr. Thomas Einstein, Einstein's great grandson, who shared some wonderful stories. We are also learning from Dr. John Norton, Distinguished Professor in the Department of History and Philosophy of Science and Dr. Allen Janis, Professor Emeritus in the Department of Physics and Astronomy at the University of Pittsburgh.

The goal is to create the experience of live theater for audiences and I believe we are on our way of doing this successfully and effectively.
Q & A with the actor, Matt Henderson
Matt Henderson is a Pittsburgh based actor who has appeared in many of Prime Stage’s productions. He will be playing the role of Albert Einstein in the one-person show.

It has been so fun to see you in past Prime Stage Theatre performances, could you tell us our preparation to play someone as iconic as Albert Einstein? To prepare for this role, I read several books about Einstein's life and his theories. In the play, Einstein talks a lot about his career, his family, and his groundbreaking scientific ideas, so it was helpful to understand the finer details of all of those things in order to speak about them from a place of authenticity. In addition to reading, I learned a great deal from watching videos of Einstein discussing topics that he feels a passionate connection to. This helped me gain a better sense of how he expressed himself, the way he used language, and his physical presence. Watching videos also helped me with nailing down the nuances of Einstein's German accent, which was tricky and fun!

_Einstein, A stage Portrait_ is a one-person show. You are the only actor in this production! Is that exciting? How is it different from rehearsing and performing with a cast? Being the only actor is exciting, if a little daunting at times! When I'm working with other actors in a show, I'm always reacting to the energy my fellow cast members bring into the scene. Einstein spends the entire play talking to the audience, so in this show, the audience is my only scene partner. Since I've been doing a lot of rehearsing on my own at home without an audience, it's been a unique challenge figuring out how to communicate with a scene partner who won't show up until the performance! Luckily, I've been able to meet with Lisa Bansavage, a consultant for this production, as well as Wayne Brinda, the director, over Zoom the past few weeks. They've been a great sounding board and have given me some really helpful feedback in shaping my performance.

How is the rehearsal process going? Are you doing everything over Zoom or have you and Wayne been able to do some work in-person? The rehearsal process has been really unique and fun! About six weeks prior to the performance, I started meeting with Lisa and then Wayne over Zoom to work on dialect and character. Then three weeks prior to the show, I started meeting with Wayne for some limited in-person rehearsals to work on blocking. It's definitely a challenge navigating a full production process while staying safe and adhering to COVID-19 restrictions. But I've really enjoyed figuring out new and different processes to make the work happen. Einstein himself was an innovator who loved to think outside the box, so I think it's fitting that we've developed new ways of working while we bring his story to the stage.
The Life of Albert Einstein

Albert Einstein is known as the greatest scientist of the 20th century. Einstein's theories of special and general relativity drastically altered man's view of the universe, and his work in particle and energy theory helped make possible quantum mechanics and, ultimately, the atomic bomb. Did you know the he also played the violin and supported civil rights? Read the bio below to learn more about Einstein's incredible life.

He was born in 1879 in Ulm, Germany and was the first child of Hermann and Pauline Einstein. Though he attended school as a young boy, he also received instruction at home on Judaism and violin. By the age of twelve he had taught himself geometry. Einstein decided to study math and physics so he could become a teacher. Einstein thought he would be good at this because he could think mathematically and abstractly. In 1896 he renounced his German citizenship. He was not a citizen of any country until 1901 when he became a citizen of Switzerland. In 1900 he graduated as a teacher of math and physics and married Mileva Maritsch in 1901. The couple had two sons prior to divorcing. Einstein later married his cousin Elsa Einstein. From 1902 through 1909, Einstein worked in a patent office in Bern, Switzerland. Though menial, the job turned out to be a perfect fit for Einstein, who found he could breeze through his office duties in a few hours and spend the rest of the day writing and conducting research. He earned a Ph.D. in 1905.

While working at the patent office, Einstein wrote a paper on what is now known as the special theory of relativity. This paper contained two ideas. The first stated that the laws of physics had to have the same form in any frame of reference. The second hypothesis stated that the speed of light was a constant. Later that year Einstein also showed how mass and energy were equivalent. This work contains the most famous formula of the world "E = mc^2".

Following an impressive few years of work, Einstein became a lecturer at the University of Bern. In 1909 he finally got a post at a university when he became a faculty member at the University of Zurich. In 1911 Einstein taught at Carl-Ferdinand University in Prague. The following year he returned to Germany to continue his work. In 1916 Einstein published his general theory of relativity. This theory linked gravitation, acceleration and the four dimensional space-time. An object of very large gravitational mass, such as the sun, would therefore appear to warp space and time around it, which could be demonstrated by observing starlight as it skirted the sun on its way to earth. In 1919, astronomers studying a solar eclipse verified predictions Einstein made in the general theory of relativity, and he became an overnight celebrity. Later, other predictions of general relativity, such as a shift in the orbit of the planet Mercury and the probable existence of black holes, were confirmed by scientists. He won the Nobel Prize for Physics in 1921.
The Life of Albert Einstein cont.

Einstein was not only a scientist, but also a social activist and a humanitarian. He spoke out against the German involvement in World War I. Einstein traveled the world lecturing and raising funds for a planned Hebrew University in Jerusalem. On one of these visits, he was offered a post with the Institute for Advanced Study near Princeton University. Einstein accepted, believing that he would spend seven months of the year in Munich and five months of the year in the United States. In December of 1932 he left for the United States. A month after his departure the Nazis assumed control of Germany. Einstein never returned to Germany.

In 1935 Einstein was granted permanent residency in the United States. In 1939, despite his lifelong pacifist beliefs, he agreed to write to President Franklin D. Roosevelt on behalf of a group of scientists who were concerned with American inaction in the field of atomic-weapons research. Like the other scientists, he feared sole German possession of such a weapon. He played no role the development of the atomic bomb and later deplored their use against Japan. After the war, he called for the establishment of a world government that would control nuclear technology and prevent future armed conflict.

In 1950, he published his unified field theory, which was quietly criticized as a failure. A unified explanation of gravitation, subatomic phenomena, and electromagnetism remains elusive today. Albert Einstein, one of the most creative minds in human history, died in Princeton in 1955.

Biography from: https://starchild.gsfc.nasa.gov/docs/StarChild/whos_who_level2/einstein.html & https://www.history.com/this-

When Einstein’s 12-year-old Eduard asked his father why he was so famous he got the answer:

"When a blind beetle crawls over the surface of a curved branch, it doesn't notice that the track it has covered is indeed curved. I was lucky enough to notice what the beetle didn't notice."

quoted in Max Flückiger, Albert Einstein in Bern, Bern 1974

day-in-history/albert-einstein-born

Fun Facts about Albert Einstein

- Albert experienced speech problems as a child. His parents were worried that he wasn't very smart!
- When he was 5 years old and sick in bed, Einstein’s father bought him a device that sparked his interest in physic. It was a compass!
- He failed his first try on his entrance exam for college (this gives us all hope!).
- He was offered the presidency of Israel.
- He auctioned off a hand-written version of his Theory of Relativity in 1940 for 6 million dollars in order to help with the war effort.
- Albert had a sister named Maja.
- Einstein named his violin Lina. "Most joy in my life has come to me from my violin."
Activities & Experiments

We encourage you to use these in-home or classroom activities to spark personal connections with the story and discoveries of Albert Einstein.

Art Gallery
There are many photographs of Einstein in circulation, but not many representations of him in other mediums. Pick an artistic medium (paint, chalk, sculpture, etc.) and bring Einstein to life.

Draw a thought experiment
While listening to Mozart, his favorite composer, think of a question or topic that you are curious about. Draw a picture of a possible experiment or idea about the topic or question. This was one of Einstein's favorite things to do, and it was often said that he thought in pictures rather than words. Many of his theories began as visuals and pictures before they became formal mathematical formulas.

Einstein Journal Entries *(These questions can be used in journal entries or group discussions)*
1. While most people think of time as a constant, Einstein showed that time is an illusion; it is relative — it can vary for different observers depending on your speed through space. What would it be like to be able to control time? Would you want to go into the future or into the Past? Would you want to speed it up, or slow it down?
2. Many of Einstein’s famous quotes prove that his wisdom and curiosity extend far beyond the realm of science. Write down each of the following quotes and explain in your own word what Einstein meant by each of them.

    "I simply imagine it so, then go about to prove it."
    "For me a simple message, to think and act with courage, independence and imagination."
    "My only talent for genius is my inquisitiveness."
    "Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world."

Learn more about the discoveries of Albert Einstein through these fun science experiments.

Bending Light
Einstein was the first scientist to put forward the notion that light was both a wave and a particle. Help young students or children build their understanding of some of the curious ways light behaves with this experiment.

You'll need: *A glass half full of water & *A straw.

Look at the straw from the top, bottom and the side, focusing especially on where the straw enters the water. Do they see anything strange? Your children or students should be able to see how light bends, or refracts, when it passes through gases and liquids.

Defying Gravity
Einstein’s theories about gravity are both astounding and controversial. Here is an antigravity experiment that will amaze students.

*Materials:* strong bar magnet; clear glass (may be plastic); paper clips; thread; tape; assorted objects such as coins, plastic chips, paper, another paper clip, etc.

*Directions:* Place the glass on a flat surface; lay the magnet across the top of the mouth of the glass as shown. Attach thread to one end of a paper clip. Bring the paper clip up to the magnet and allow it to stay in that position. Loosely apply a piece of tape over the free end of the thread and onto the table. Pull on the free end of the tape until the paper clip is still attracted to the magnet yet leaves a space between the paper clip and the magnet. Firmly press the tape onto the table to keep the paper clip suspended. Predict what will happen when an object is placed in the space between the paper clip and the magnet. Experiment with a variety of objects.
Reading List

Einstein: A Stage Portrait
If this play has piqued your interest, why not check out a book or movie and explore more? Your public libraries have many online resources you can access from home through online services Libby, Hoopla, or Flipster! Check your library’s website for help in getting started.

For Young Folks...

I am Albert Einstein by Brad Meltzer (available as an eBook)
This book for young children is written in the first person as though the narrator IS Albert Einstein. It talks about his early days growing up, and how the gift of a geometry book changed his life.

Odd Boy Out: Young Albert Einstein by Don Brown (available as an eBook)
Geared towards young children, this summary of Einstein’s life begins with his birth and takes a deeper look into his childhood—his frustrations and isolation as well as his varied interests. From building a fourteen-story high house of cards to his fascination with a compass, we get a real-world picture of a boy that didn’t fit in but found his way to make some amazing discoveries about the world.

Albert Einstein: Universal Genius by Mike Venezia
This early reader from Scholastic intersperses cartoon-like drawings with real life photographs as it tells the story of Einstein’s life.

Albert Einstein by Kathleen Krull
For middle elementary readers, this biography is part of the Giants of Science series with starred reviews.

For Adults

The Other Einstein by Marie Benedict (Fiction, available as an eBook)
This novel offers us a window into a brilliant, fascinating woman whose light was lost in Einstein’s enormous shadow. It is the story of Einstein's wife, a brilliant physicist in her own right, whose contribution to the special theory of relativity is hotly debated and may have been inspired by her own profound and very personal insight. Written by a local author!

Einstein’s Dreams by Alan Lightman (Fiction, available as an eBook)
This is a work of fiction that weaves in the whimsy of Einstein’s days as a patent clerk in Switzerland and the types of dreams he may have had.

Einstein in Love by Dennis Overby
This is a great piece of writing and research about Einstein’s relationship with his first wife who served as his sounding-board in the miracle year of 1905 when he discovers special relativity and lays the groundwork for quantum theory.

Out of My Later Years by Albert Einstein (available as an eBook)
Out of My Later Years provides a clear and handy survey of Einstein’s point of view, revealing a brilliant thinker fully engaged with science, philosophy, and worldwide humanitarian issues.

Movies

Albert Einstein, documentary; produced by ITN Factual Ltd. for A&E Television Networks
Einstein Revealed, documentary; a Nova production
I.Q. A fictional romance comedy with Meg Ryan, Tim Robbins and Water Matthau as her uncle Albert Einstein.
Please go to our website: [www.primestage.com](http://www.primestage.com) to find this form and send it back directly online!

Or you can mail it to us at: Prime Stage Theatre P.O. Box 99446 Pittsburgh, PA 15233.

**THE RESOURCE GUIDE TEACHER EVALUATION FORM**

Prime Stage constantly assesses the work provided by our education department. Your feedback is vital to our ongoing need for funding for this program. Please fill out the following forms and mail or email them to the address given below. Thank you.

YOUR NAME__________________________________________________________________

NAME OF SCHOOL________________________________________________________________

EMAIL ADDRESS________________________________________________________________

Which part(s) of this experience you find most helpful for you and your students?

Was the guide useful to you?

Which part(s) did you find most helpful?

How can we improve the theatrical experience for the future?