



# Stephen Hawking

PERFORMED BY MARIA BELOUSOVA

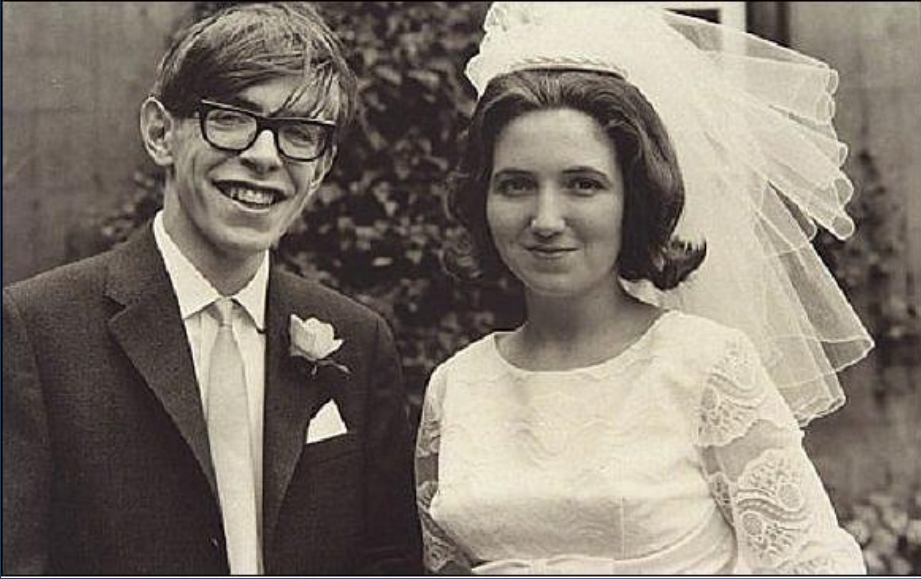
# Who is he?



## Stephen William Hawking

- ▶ was an English theoretical physicist, cosmologist, and author who was director of research at the Centre for Theoretical Cosmology at the University of Cambridge at the time of his death.
- ▶ Hawking was well known for his theories on black holes, the expanding universe and space-time.





# Biography

- ▶ British cosmologist Stephen William Hawking was born in England on Jan. 8, 1942.
- ▶ He attended University College, Oxford, where he studied physics and earned a degree in Natural Science three years later.
- ▶ Stephen went on to Cambridge to do research in Cosmology, the study of the universe as a whole.
- ▶ He obtained his PhD degree in applied mathematics and theoretical physics.
- ▶ Hawking met Jane Wilde, and the two were married in 1965. The couple had three children before separating.



# Disease

- ▶ In 1963, Stephen Hawking was diagnosed with the dreadful disease Amyotrophic Lateral Sclerosis (A.L.S.), an incurable degenerative neuromuscular disease.
- ▶ This disease gradually paralyzes the body.
- ▶ He was not expected to live more than two years.







- ▶ But he lived another 55 years and died in 2018.
- ▶ He win numerous other awards, grants and fellowships.
- ▶ Hawking continued to publish many academic papers and books through his career. He had been credited with bringing advanced physics to the mainstream with his best-selling book "A Breath History of Time".



# Career

- ▶ All his life he continued to work despite the disease's progressively disabling effects.
- ▶ Over the course of his career, Hawking studied the basic laws governing the universe. He proposed that, since the universe boasts a beginning — the Big Bang — it likely will have an ending.



# Discoveries



- ▶ Working with fellow cosmologist Roger Penrose, he demonstrated that Albert Einstein's Theory of General Relativity suggests that space and time began at the birth of the universe and ends within black holes, which implies that Einstein's theory and quantum theory must be united.
- ▶ Hawking also determined that black holes are not totally dark but instead emit radiation.



- ▶ As the disease spread, Hawking became less mobile and began using a wheelchair. Talking grew more challenging and, in 1985, an emergency tracheotomy caused his total loss of speech. A speech-generating device constructed at Cambridge, combined with a software program, served as his electronic voice, allowing Hawking to select his words by moving the muscles in his cheek.





# Books



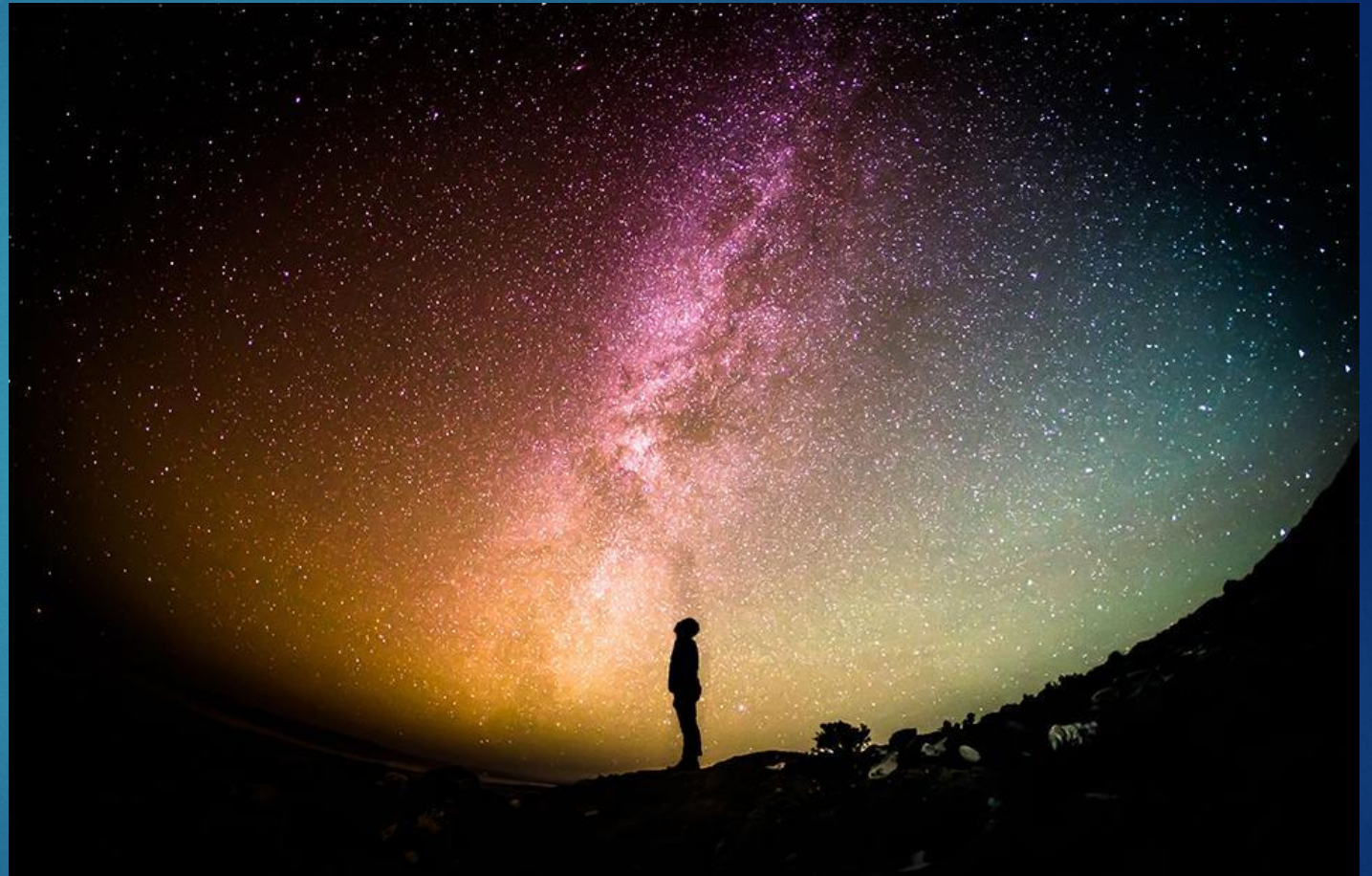
- ▶ Hawking was a popular writer. His first book, "A Brief History of Time" was first published in 1988 and became an international best seller.
- ▶ Hawking went on to write other nonfiction books aimed at nonscientists. These include "A Briefer History of Time," "The Universe in a Nutshell," "The Grand Design" and "On the Shoulders of Giants."



Hawking was an  
academic and  
cultural icon.

He said:

"Look up at the stars and not down  
at your feet. Try to make sense of  
what you see, and wonder what  
makes the Universe exist. Be curious."







Thanks for attention!