

## **STEPHEN HAWKING - POSITIVITY 'BENCHMARK'**

British physicist and mathematician Stephen Hawking has made fundamental contributions to science of cosmology - the study of the origins, structure, and space-time relationships of the universe.

Stephen Hawking was born in Oxford, England on January 8, 1942. He grew up in a highly educated family. Both of his parents attended Oxford University and his father, Frank, was a medical researcher. When he was nine, Stephen got very poor grades in school and just managed to be an average student. He enjoyed being a member of the school's boat club as well as classical music. After graduation, he went to Cambridge to study for his Ph.D.

While Hawking was working on his Ph.D at Cambridge University, he began to have health issues. After going through a series of tests, doctors discovered that Hawking had a disease called ALS (also called Lou Gehrig's disease). At the time, the doctors said he only had a few years to live. But miraculously he lived 70 years, because of his indomitable spirit.

Hawking made his first major contribution to science with his idea of singularity, a work that grew out of his collaboration with Roger Penrose. Hawking's research led him to study the characteristics of the best-known singularity: the black hole. Hawking's continuing examination of the nature of black holes led to two important discoveries. The first that black holes can give off heat opposed the claim that nothing could escape from a black hole. The second concerned the size of black holes. As originally conceived, black holes were immense in size because they were the end result of the collapse of gigantic stars. Hawking suggested the existence of millions of mini-black holes formed by the force of the original big bang explosion. In the 1980s Hawking answered one of Einstein's unanswered theories, the famous unified field theory.

As Hawking's physical condition grew worse his intellectual achievements increased. He wrote down his ideas in *A Brief History of Time: From the Big Bang to Black Holes*. It sold over a million copies and was listed as the best-selling nonfiction book for over a year. In 1993 Hawking wrote *Black Holes and Baby Universes and Other Essays*, which, in addition to his scientific thoughts, contains chapters about Hawking's personal life. He co authored a book in 1996 with Sir Roger Penrose titled *The Nature of Space and Time*.

Hawking's work in Modern Cosmology and in theoretical Astronomy and Physics is widely recognized. He became a fellow of the Royal Society of London in 1974 and five years later was named to a professorial chair at Cambridge University that was once held by Sir Isaac Newton (1642–1727). Beyond these honours he has earned a host of honorary degrees, awards, prizes, and lectureships from the major universities and scientific societies of Europe and America. By the end of the twentieth century Stephen Hawking had become one of the best-known scientists in the world. His popularity includes endorsing a wireless Internet connection and speaking to wheelchair-bound youth. He also had a special appearance on the television series *Star Trek*.

### **The success formula of Stephen Hawking:**

The life of Stephen Hawking is an inspiration to every individual many things need to be learnt from his extraordinary life and achievements:

1. He has used technology to overcome his disability. He explained the power of technology that transforms lives, and communicates ideas for innovation and development.

2. He refused to let his disability halt his research. He advises other disabled people concentrate on the things that the disability prevents you and don't regret on the thing it interferes.
3. He was always curious to learn new things. He advises others to look at the stars and not at the feet and make sense of what you see.
4. "Keep an active mind". He had never lost his sense of humor.
5. He stood by his principles. He motivates the people to stand by the principles to enjoy life.
6. He never gave up. Determine to accomplish your goals.
7. He valued time as a precious resource. "I have so much that I want to do. I hate wasting time" he remarks that it's impossible to turn back the clock.
8. "Knowledge is to be shared". He shared his knowledge.

Though Hawking suffered from motor neuron disease from the age of 22 he lived a highly intellectual and challenging life till 76th year. He died on 14 March 2018.