

# The Superstar Scientist

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January 17, 2001. The queues of people at Siri Fort reminded one of the lines of people waiting during the International Film Festivals for tickets to a steamy, European film. In this case though, the profile of the crowd, about 4000 people was different- students, bureaucrats, academics, and of course socialites. The cops at the gate wondered why there were so many people waiting to attend a lecture by someone who can't speak and has to move around in a wheelchair. But for the waiting people, it was a chance of a lifetime to actually see and "hear" the living legend, Stephen Hawking.

Hawking delivered a public lecture on "Predicting the Future: From Astrology to Black Holes". Maybe it was the "astrology" in the title or the hype generated in the press before his talk, the auditorium overflowed. Like everything else in this city, the bureaucratic and political set got the passes while school and college students who really wanted to be there, had to be content with watching him over television. Never mind that most people in the audience confused his name with that of a popular pressure cooker!

Born of middle class parents on 8<sup>th</sup> January 1942, Hawking attended a local private school where he showed early signs of possessing an exceptional mind, especially in mathematics and physics. After school, came a scholarship to Oxford where he did an undergraduate degree in Maths and Physics. The rigors of an Oxford degree were not particularly taxing for an astonishing mind like Hawking, and consequently he spent a lot of his three years doing the kinds of things any undergraduate does- taking part in sports, indulging in drunken brawls and being bored.

After Oxford, Hawking started his doctorate at Cambridge with the famous cosmologist, Dennis Sciama. This was the time when the first symptoms of amyotrophic lateral sclerosis (ALS) or Lou Gehrig's disease, an incurable affliction of the nervous system, started appearing. The disease affects the motor neuron system leading to a creeping paralysis with the patient gradually losing control over his muscles. Intriguingly, the memory and the thought process are unaffected.

Battling all odds, and refusing to sink into self-pity, Hawking with the tremendous support provided by his fiancée Jane, managed to finish his doctorate. The doctors had given him two years to live; he not only outlived their predictions but got married, had three children and joined one of the Cambridge colleges as a Fellow! In 1979, he was appointed as the Lucasian Professor of Mathematics at Cambridge. Three centuries earlier, Isaac Newton had held this chair and now Hawking had established himself as his intellectual heir.

Hawking's work has focussed on abstruse subjects like singularities, black holes and quantum cosmology. Black holes are among the strangest objects in the universe- objects

which are so massive and dense that it was thought that not even light could escape from their enormous gravity. In 1974, the scientific community was startled when Hawking showed that not only do black holes emit radiation, they continue to do so until they evaporate.

Awards and recognition came fast- Fellowship of the Royal Society, Einstein Prize, Wolf Prize, Gravity Research Foundation prize ( a prize endowed by an American millionaire who thought that anti-gravity could cure his gout) and several others.

But real stardom came with the publication in 1988 of "A Brief History of Time", a popular account of his work. Not that Hawking was a newcomer to writing. He had already written one of the most authoritative monographs on cosmology. But writing for the lay-reader is quite a different story than describing your research to your peers. Nevertheless, the book was a phenomenal success and made Hawking into a celebrity. It has sold almost 10 million copies worldwide and translated into numerous languages. Subsequently, he went on to write many popular books and also an autobiography, "My Brief History".

Hawking as a person, had his share of frailties as described by his first wife Jane (whom he divorced in 1990 to marry his personal assistant) in her book, "Travelling to Infinity- My life with Stephen Hawking". She described Hawking as self-centred, maybe a trifle selfish human being who is totally insensitive to the emotions and feelings of those who care for him.

On March 14<sup>th</sup>, 2018, this personification of the indomitable human spirit finally succumbed to the inexorable law of nature. He was, as Shri K.R. Narayanan, the then President of India had described him, a living example of the triumph of Mind over Matter.

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