



George Gamow

1904 - 1968

Most scientists believe that 15000 million years ago all the matter in the observable Universe was concentrated in a small space and was blown apart in an immense explosion called the **Big Bang**. George Gamow predicted that it would have produced a background of microwave radiation (radiation with a wavelength of a few mm) and later it was found.

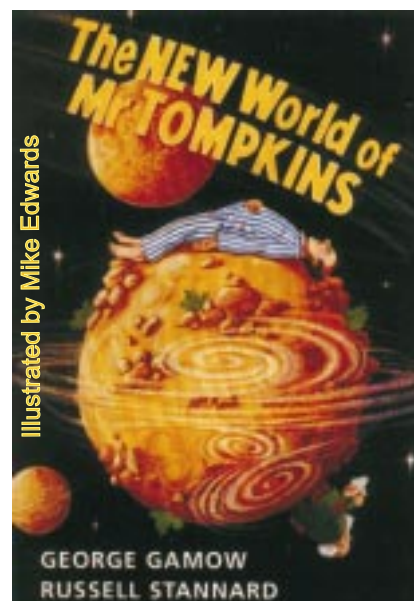
George Gamow was born in 1904 in Odessa, Russian at that time; there he grew up and began his education. Later, in 1936, he emigrated to the USA where he became a well known physicist. Both his parents were teachers. Reading Jules Verne at the age of 7, he dreamed about travelling to the Moon. One of his first physical experiments was to construct an alarm with the help of a small bell and battery.

George was 9 years old when his mother died and he lived with his father. It is said that once his father gave him a microscope he immediately began to examine the communion bread in the local church to see if it was really different from ordinary bread. He attended the local gymnasium, but it was the time of World War I and the Revolution, so **very often the lessons were interrupted by shots or explosions**. George was mainly self-taught and sometimes his knowledge was greater than that of his teachers.

In 1922, Gamow entered the University in Odessa and soon transferred to the University of St. Petersburg, where he studied optics and later cosmology, gaining his PhD in 1928. At the same time he visited the University of Göttingen. His work impressed Niels Bohr, the Danish physicist, who then invited him to the Institute of Theoretical Physics in Copenhagen. There he worked on problems of nuclear physics and the process of nuclear reactions in stars. In 1929, Gamow worked at the Cavendish Laboratory in Cambridge.



They tried to escape from Russia by boat....



One of his popular scientific books



He dreamed of travelling to the moon

When returning to the Soviet Union, he understood that the political climate had changed and that he could not travel as he had before. With his wife he began devising a scheme to escape from the country. Their first attempt to flee to Turkey by boat was not a success. The problem was solved when they were sent by the government to attend the Solvay Congress in Brussels. They fled to the USA, where he became Professor of Physics at George Washington University. There he developed his famous theory of **nuclear decay**.

In the entirely different field of molecular biochemistry Gamow contributed to the solution of the genetic code in which virtually all heritable biological information is stored.

In 1956, Gamow left his wife for a younger woman and moved from Washington University to the University of Colorado.

In addition to his research work, Gamow was the author of many popular scientific books and was awarded the Kalinga Prize of the United Nations in 1956. He created the character of Mr. Tompkins whom he used to tell about science in an understandable form.

George was tall, blue-eyed and was renowned for his sense of humour. He loved to regale his friends with tricks. His habit of drinking alcohol to excess seems ultimately to have led to his early death at the age of 64.

S.E.