## Speech of Professor Andrew John Wiles

## Winner of King Faisal International Prize For Science 1998/1418H.

Saturday 14.2.1998 (17.10.1418A.H.)

Your Royal Highness Prince Sultan Ibn Abdul Aziz Second Deputy Premier, Minister of Defense and Aviation And Inspector General Your Royal Highnesses, Your Excellencies, Distinguished Guests,

It is a great honour to be awarded the 1998 King Faisal International Prize for Science. I am a mathematician and I am being honoured for solving a problem called Fermat's Last Theorem. This was a problem first posed by Pierre de Fermat, a Frenchman, in the first part of the 17th century. Fermat wrote in the margin of his copy of a book by Diophantus, an Alexandrian mathematician of the third century, "It is impossible to divide a cube into two cubes, a fourth power into two fourth powers or more generally any power higher than the fourth into two like powers. For this I have truly discovered a marvelous proof. However, this margin is too small to contain it."

This claim was found after Fermat's death by his son who then published it. It became perhaps the most celebrated problem in mathematics. For although Fermat claimed it to be true, no one could find a proof.

As a ten-year-old child I came across this problem in a book and found it irresistible. I learned what. I could about it and tried to solve it. Not surprisingly, however, my early attempts came to nothing. Then in 1986, after three mathematicians had found a link between Fermat's problem and

modern mathematics, I fell once more under its spell. And after eight years of continuous effort I finally found a proof. My childhood dream came true.

I cannot properly express my thanks to my wife Nada who shared, if not the mathematics at least the drama of, this struggle. I wish also to express my great thanks to the King Faisal International Prize for this wonderful award, as well as for the invitation to visit this country in person to receive it.