Real lives

Maths experts meet to sum up achievements of Sir Michael, 80

One of the most influential mathematicians of the 20th century, Sir Michael Francis Atiyah, is to be honoured by some of the world's finest scientific minds in Edinburgh today, at an event to mark his 80th birthday.

Sir Michael, an honorary professor at Edinburgh University, is being honoured at a three-day conference, organised by the International Centre for Mathematical Sciences.

He was born in London on April 22, 1929, the eldest son of Lebanese writer and diplomat Edward Atiyah and his Scottish wife, Jean.

His brother, Patrick Atiyah, went on to be a prominent academic and professor of law.

Sir Michael moved with his family to Sudan at an early age and was educated at Victoria College in Cairo and then Manchester Grammar School.

He studied mathematics at Cambridge University under Sir William Hodge, a former student at the University of Edinburgh.

He met his future wife Lilly Brown, a fellow mathematics graduate from the University of Edinburgh, whilst studying in Cambridge. They married in 1955 and had three sons together.

Sir Michael then moved between Princeton University, New Jersey, and Cambridge before becoming a reader and professional fellow at Oxford.

In 1963, he worked with the American mathematician Professor Isadore Singer to devise the Atiyah-Singer index theorem - one of the landmarks of modern mathematics.

Professor Singer will be attending the conference this week, as will eminent American physicist Professor Edward Witten, one of the leading thinkers in String theory, a significant branch of theoretical physics.

Sir Michael took up the position of Chair at the Institute for Advanced Study in Princeton in 1969 and Royal Society Research Chair at Oxford in 1962.

He was awarded an honorary degree of Doctor of Science at the University of Edinburgh in 1984 and later became an honorary professor.

He was president of the Pugwash Conferences on Science and World Affairs, an
BIRTHDAY TRIBUTE: Sir Michael Atiyah will be honoured today

international organisation of scholars discussing conflict and global security, from 1997 to 2002. He then became president of the Royal Society of Edinburgh in 2005 and retired from this post in autumn last year.

The professor's many awards include the two most important prizes in mathematics: the Fields Medal, which he won in 1966, and the Abel Prize he shared in 2004 with Professor Singer.

He now lives with his wife Lily in the Grange.

Outside academia, one of Sir Michael's main interests is gardening. The couple own a log cabin in the village of Kirkmichael, Ayrshire, where he enjoys planting trees and growing rhododendrons.

He has recently been involved with Michael Frayn's production of Copenhagen, at Edinburgh's Lyceum Theatre, which explores the life and work of German physicist Werner Heisenberg in the Second World War.

He has three grandchildren, 13-year-old Ellen and ten-year-old twins, Ned and Jamie.

Following the conference this week, Sir Michael will take part in two days of events reflecting his interests in history and politics, organised with the Royal Society of Edinburgh.