



John Torrence Tate

John Torrence Tate was born on 13 March 1925 in Minneapolis, Minnesota in the USA. He has just retired from his position as professor and Sid W. Richardson Chair in Mathematics at the University of Texas at Austin.

John Tate received his A.B. (Bachelor of Arts) from Harvard College in 1946 and his Ph.D. from Princeton University in 1950 with Emil Artin as his thesis advisor.

Tate's scientific accomplishments span six decades. He was a research assistant and instructor at Princeton (1950–53) and a visiting professor at Columbia University (1953–54). In 1954 Tate moved to Harvard University where he was a professor and taught for thirty-six years. In 1990 he accepted his last academic position as professor and Sid W. Richardson Chair in Mathematics at the University of Texas at Austin.

Tate has also held visiting positions at the University of California at Berkeley, Institut des Hautes Études Scientifiques at Bures-sur-Yvette, France, Université de Paris at Orsay, Princeton University, and École Normale Supérieure in Paris.

Tate has made fundamental contributions in algebraic number theory and in related areas of algebraic geometry. He has also had a profound influence on the development of number theory through his role as a Ph.D. advisor. Tate will receive the 2010 Abel Prize “for his vast and lasting impact on the theory of numbers”, to quote the Abel committee.

Tate took an interest in mathematics from an early age. He grew up with a fascination for mathematical puzzles, inspired by books owned by his father, who was a physics professor. Though he loved the ideas he had read about, he decided to study physics at the university, but already during his first year at Princeton he realized that his real love was mathematics. He was allowed to transfer to graduate study in mathematics and received his Ph.D. in 1950.

In the course of 60 years, Tate has left his mark on modern mathematics. It is remarkable how many mathematical concepts are named after him, and this is a measure of the influence of his

ideas in mathematics. In the literature, we find the Tate module, Tate curve, Tate cycle, Hodge-Tate decompositions, Tate cohomology, Serre-Tate parameter, Lubin-Tate group, Tate trace, Shafarevich-Tate group, Néron-Tate height, and so on.

Tate has received many awards and honours. As early as 1956, Tate was awarded the American Mathematical Society's Cole Prize for outstanding contributions to number theory. When Tate was awarded the Steele Prize for Lifetime Achievement from the American Mathematical Society in 1995, his response was: "A lifetime of mathematical activity is a reward in itself, but it is nice to have recognition for it from peers" (Notices of the AMS). Tate was honoured "for his creation of fundamental concepts in algebraic number theory" when he shared the Wolf Prize in Mathematics with Mikio Sato in 2002/2003.

Tate has received a Sloan Foundation Fellowship (1959 - 1961) and a Guggenheim Fellowship (1965–1966). He was an invited speaker at the International Congress of Mathematicians in 1962 in Stockholm and again in 1970 in Nice. In 1972, he presented the AMS Colloquium Lecture.

John Tate was elected to the U.S. National Academy of Sciences in 1969. He was named a foreign member of the French Academy of Sciences in 1992 and an honorary member of the London Mathematical Society in 1999.