VINAY DEODHAR

Vinay Deodhar attended Bombay University and received his doctoral degree from there in 1974 with Madabusi Raghunathan. He was a research fellow at the Tata Institute of Fundamental Research for a year after receiving his degree and then was a visiting member at the Institute for Advanced Study at Princeton from 1975 to 1977. He then returned to the Tata Institute, one of the great centers of mathematics in the world. Vinay was a Fellow at the Tata Institute from 1977 to 1982, spending one year as a Research Fellow at the Australian National University in Canberra and visiting Indiana University in 1981. He joined the faculty the following year as an associate professor. He was awarded tenure two years later and became a full professor in 1988. He retired in 2012

Vinay made fundamental contributions to mathematics, particularly Lie theory. While still a student, he wrote up a highly influential set of notes based on lectures by Robert Steinberg. In 1978, he was awarded the Young Scientist Award from the Indian National Academy. Vinay wrote several highly influential papers on the (weak) Bruhat order on Coxeter groups. His work on the Bruhat order is inextricably connected with the development of the Kazhdan-Lusztig polynomial, which plays a central role in modern representation theory. Vinay was one of the developers of Kazhdan-Lusztig theory (and in fact he coined the term) and did important work on the geometry of flag varieties. In 1992, he edited a volume of the AMS series Contemporary Mathematics on the subject.



Vinay was also a very popular teacher, highly organized and known for his clear exposition. In 1998, he earned our highest teaching award, the Rothrock Teaching Award. He also played a major role in running the teaching mentor program for the Math Department and was the head of the program for several years.

Vinay served a term as director of graduate studies, a job he took very seriously, especially in the selection of new graduate students. He supervised three PhD students of his own, all of whom remain academic mathematicians.

Born: Bombay, India December 3, 1948 Died: Bloomington, Indiana January 18, 2015

Years at IU: 1982-2014