

MEMORIAL RESOLUTION

GORO AZUMAYA

(February 2, 1920 – July 8, 2010)

Professor Goro Azumaya was born in Yokohama, Japan, and raised in Osaka. He obtained his undergraduate degree from Tokyo University and his doctorate in mathematics from Nagoya University in 1949. His thesis advisor was the number theorist Professor Shokichi Iyanaga. Professor Azumaya was an assistant professor at Nagoya University until 1953, when he moved to Hokkaido University to become a full professor. From 1956 to 1959 he visited in the United States, for two years at Yale followed by one year at Northwestern. He then returned to Hokkaido University until 1964, when he visited at the University of Massachusetts. The following year he visited here at Indiana. He returned to Japan for one more year before accepting a permanent position at IU in 1968.

Professor Azumaya had an international reputation in mathematics. In addition to the United States and Japan he gave invited addresses in Germany, Hungary, Belgium, Switzerland, France and China. In 1975-76 he was a visiting professor at the University of Munich and in 1983-84 he was a research member at ETH in Switzerland. He was author thirty-six mathematical research papers, published in major journals.

Professor Azumaya made many important contributions to modern abstract algebra. In 1951 in a fundamental paper entitled, "Maximally central algebras," he introduced the notion of what have been come to be called Azumaya algebras and investigated their important basic properties. He then proceeded to classify such algebras over so-called henselian rings. Today these objects are a standard part of noncommutative algebra with important applications to geometry and number theory. He also made important contributions to the theory of group actions on rings and to module theory. In particular there is the standard result in the theory of module decompositions referred to as the Krull-Schmidt-Azumaya theorem. Of equal importance was his work in 1959 on a duality theory of modules, and early version of what is now called Morita duality theory.

While at Indiana Professor Azumaya had sixteen doctoral students. In 1971 alone seven students obtained their doctoral degrees under his guidance.

Among the honors bestowed on him was the Chunichi prize, given annually to five people living in the Nagoya area for excellence in the sciences and arts. He received the prize in 1949. It was awarded to him jointly with another distinguished mathematician, Professor Nakayama, for research on infinite dimensional algebras. His sixtieth birthday was celebrated in Japan with a special volume of papers dedicated to him. In May of 1990 there was a conference here at Indiana University held in celebration of Professor Azumaya's seventieth birthday. The conference, supported by the National Science Foundation, attracted over a hundred mathematicians, including many of the most distinguished algebraists of the time.

Professor Azumaya and his wife Matsuko, were a quiet, unassuming couple. They were also gracious hosts and gave special support to Japanese students and visitors at IU. After his retirement they remained in Bloomington until the year before his death, when they returned to Japan.

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