*This obituary appeared in the Kitchener-Waterloo Record on May 7, 2002. It was written by Dan Younger.*

William T. Tutte, Distinguished Professor at the University of Waterloo, died on Thursday afternoon, May 2, 2002. The cause was congestive heart failure, complicated by lymphoma of the spleen, both diagnosed within six weeks of his death. His age was 84.

It was just last October that he was inducted as Officer of the Order of Canada, in a ceremony held at Rideau Hall in Ottawa. The citation read: "He is internationally renowned for his seminal work in the area of graph theory.
As a young mathematician and codebreaker, he deciphered a series of German military encryption codes known as FISH. This has been described as one of the greatest intellectual feats of World War II.

Distinguished Professor Emeritus and Honorary Director of the Centre for Cryptographic Research at the University of Waterloo, he remains one of the most influential figures in combinatorics."

Tutte was a graduate student in Chemistry at Cambridge University in England when, in January 1941, he was asked by his Tutor to go to Bletchley Park, the now legendary organization of code-breakers of Britain. Many have read of the successes which they had there in deciphering the codes produced by the machines called Enigma. In fact, that success was with the naval and air force versions; the army version of Enigma proved to be more resistant to analysis. Since they could not always read army

Enigma, they tried to read the machine-cipher named FISH, which was used only by the Army High Command. Tutte's great contribution was to uncover, from samples of the messages alone, the structure of the machines which generated these FISH ciphers. This led to the decipherment of these codes on a regular basis.

At the end of the War, Tutte resumed his studies at Cambridge, this time in mathematics. His thesis takes two strands, one of algebra and one of combinatorics, and spins them into one thread, matroid theory. Upon receiving his Ph.D., Tutte came to Canada, to join the

Faculty of the University of Toronto. In his fourteen years there, he rose to world pre-eminence in the emerging field of combinatorics.

In 1962, Tutte joined the Faculty of the University of Waterloo. The University was founded in 1957 and was, five years later, still in the process of establishing its identity and reputation. Tutte made a big contribution on both of these fronts. His presence was a magnet for combinatorialists from throughout the world. It was not only the recognized stars of the field that came to Waterloo, but those who were destined for future prominence. Indeed, Tutte was an important ingredient of the recipe which produced the Faculty of Mathematics in 1967. His presence helped to shape the character of the University.

From the time that Tutte moved to this region in 1962, until his wife Dorothea's death in 1994, he lived in West Montrose, along the Grand River, just adjacent to the covered bridge there - the Kissing Bridge. He and his wife played an active role in that community; he was well-loved by his friends there.

Tutte has received significant honours and prizes in recognition of his accomplishments. Prior to receiving the Order of Canada, he was elected to the Royal Society of Canada, and then to the Royal Society of London.

Tutte's closest surviving kin are his niece Jeanne Youlden, her three children Richard, Susanne and James, and his nephew Joseph, his two children William and John, and their children, Haley and Jessica, William and James, respectively. Most of his extended family still live in Newmarket, England, where Tutte was born and grew up.

A memorial service to celebrate Tutte's life will be held next Wednesday, May 8, 2:30 in the afternoon, at The Great Hall, Academic Building, Conrad Grebel College, University of Waterloo, Westmount Road in Waterloo, with a reception to follow.

Gifts in memory of Professor Tutte can be made to the William Tutte Postgraduate Scholarship, University of Waterloo, Office of Development, Waterloo, Ontario N2L 3G1.

*The following paragraphs were included in the obituary that ran in a British newspaper.*

Bill Tutte was born in Newmarket, Suffolk, May 14, 1917. His father William John, was an estate gardener, his mother Annie Newell a housekeeper. In his early years, the family moved around, staying the longest period near Whitby, Yorkshire, until they returned to the village of Cheveley, when Bill´s father got a position at The Rutland Arms Hotel in Newmarket. The family lived in a cottage adjacent to the village church of Cheveley; he received his primary education at the Cheveley school. At age 11, he obtained a scholarship to the Cambridge and County Day School, which brought him into contact with the larger world. He waited a year before taking that scholarship.

He entered Cambridge University in 1935, majoring in Chemistry. He also had an interest in mathematical problems, strong enough to make him join the Trinity Mathematical Society. He formed a close bond with three other members of the Society - Leonard Brooks, Cedric Smith and Arthur Stone. Each was destined to make his mark on Graph Theory. The four of them collaborated on the problem of squaring the square, i.e., partitioning a square into unequal smaller squares, publishing in 1940, a famous paper describing their solution.