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FIELDS INSTITUTE Research in Mathematical Science

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## CELEBRATING WOMEN IN MATHEMATICS

### VERA PLESS

1931- , USA- After entering the University of Chicago, Vera Pless was awarded a Bachelor's Degree after only three years of study.

Pless continued her studies at the University of Chicago working for her Master's degree. She met her future husband, a physics student, at the university and they were married in 1952 two weeks before her master's examination.



After receiving her Master's degree, Pless took a job with a physics group at the University of Chicago while her husband continued to work for his doctorate. However, not long after starting in this position, she was awarded a Fellowship to study for a Ph.D. at Northwestern University

Pless was awarded her doctorate in 1957. A publication arising from her doctoral work, *The continuous transformation ring of biorthogonal bases spaces*, was published in the *Duke Mathematical Journal* in the following year. In this paper Pless looks at dual vector spaces of countable dimension over a division ring and studies the ring  $L$  of all continuous linear transformations on such a space.

Pless worked at the Air Force Cambridge Research Laboratory from 1963 to 1972 with a short break for maternity leave when her third child was born. During this time she became one of the leading world experts on coding theory.

In 1975, Pless was appointed a full professor at the University of Illinois at Chicago.

*Biography courtesy of The MacTutor History of Mathematics archive*