THE UNIVERSITY OF MICHIGAN

Regents Communication

ACTION REQUEST

Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

John R. Stembridge, Ph.D., professor of mathematics in the College of Literature, Science, and the Arts, retired from active faculty status on May 31, 2020.

Professor Stembridge received his B.S. (1981) degree from the California Institute of Technology and his Ph.D. (1985) degree from the Massachusetts Institute of Technology, receiving a Sloan Pre-doctoral Fellowship his final year. He served as an E.R. Hedrick Assistant Professor at the University of California, Los Angeles from 1985-88. He joined the University of Michigan faculty as an assistant professor in 1988, and was promoted to associate professor in 1990, and professor in 1995. Professor Stembridge held numerous visiting appointments at prestigious institutions both nationally and internationally.

Recognized as a leader in the field of algebraic combinatorics, Professor Stembridge had a special interest in representation theory, Coxeter groups, root systems, symmetric functions, and enumeration, as well as in computational problems that arise in these areas. In 2007, he was a member of an international team of 18 mathematicians and computer scientists who successfully mapped the Lie group E₈, one of the largest and most complicated structures in mathematics. The mapping of E₈ was a groundbreaking achievement, significant both as an advance in basic knowledge and as a major advance in the use of large-scale computing to solve complicated mathematical problems. Professor Stembridge was a part of the Atlas of Lie Groups and Representations project, whose goal was to understand, classify, and catalogue the representations of semisimple real and p-adic Lie groups, which involves challenging combinatorial and computational problems. Within the Department of Mathematics, Professor Stembridge was active in mentoring young mathematicians. He supervised eight Ph.D. students, and served on the thesis committees of several other students. He was a mentor to more than 16 postdoctoral faculty. Professor Stembridge served many years on the Doctoral Committee, including a term as doctoral chair. He was associate chair for regular faculty from 2015-17, and was a long serving member of the Computer Committee. He held editorial board positions on numerous prestigious mathematics journals over his career, and published over 66 research papers. Stembridge was the author of several Maple software packages for the study of symmetric functions, posets (partially ordered sets), root systems, and finite Coxeter groups.

The Regents now salute this distinguished scholar by naming **John R. Stembridge**, **professor emeritus of mathematics**.

Requested by:

Sally J. Churchill, J.D.

Sally J. Churchill

Vice President and Secretary of the University