

THE UNIVERSITY OF MICHIGAN
Regents Communication
ACTION REQUEST

Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

Hugh L. Montgomery, Professor of Mathematics in the College of Literature, Science, and the Arts, retires from active faculty status on June 1, 2020.

In 1966, Professor Montgomery received a Marshall Scholarship to study at the University of Cambridge, was elected a Fellow of Trinity College in 1969, and earned his Ph.D. in pure mathematics in 1972. He joined the University of Michigan Department of Mathematics in 1972 as an assistant professor, and was named a professor in 1975. He has been a visiting faculty member at the Institute for Advanced Study, Institut Mittag-Leffler, Trinity College, Université Paris-Sud, and the Heilbronn Institute for Mathematical Research. He gave an invited address at the 1974 International Congress of Mathematicians, and was awarded the *Prix Salem* that same year. He received a Sloan Foundation Fellowship, received the Henry Russel Award in 1975, and was named a Fellow of the American Mathematical Society in 2013.

Professor Montgomery's research is in number theory and in harmonic analysis. He specializes in analytic number theory, with emphasis on the distribution of prime numbers, properties of the Riemann zeta function, and the distribution of its zeros. He is well known for his formulation of a pair correlation conjecture for Riemann zeta zeros, and for developments of the large sieve method. His research outside number theory has touched on Turán's power sums, irregularities of distribution, extremal properties of trigonometric polynomials, and analytic inequalities. Professor Montgomery has 98 scholarly publications, and has authored or coauthored five books in the areas of number theory, harmonic analysis, multiplicative number theory, Fourier analysis, and the Riemann zeta function. His book *Ten Lectures on the Interface Between Analytic Number Theory and Harmonic Analysis* contains many beautiful examples of his work. His book *Introduction to the Theory of Numbers* (with Niven and Zuckerman) is one of the standard introductory texts, currently in its fifth edition.

Within the Mathematics Department, Professor Montgomery is active in mentoring young mathematicians. He supervised 18 Ph.D. students, and provided academic and research assistance to many young postdoctoral faculty. Professor Montgomery has served the department in many capacities over his career, most recently in the areas of academic advising, undergraduate scholarships, awards, and organizing undergraduate competitions and mathematical problem solving activities.

The Regents salute this distinguished scholar by naming **Hugh L. Montgomery Professor Emeritus of Mathematics**.

Requested by:

Vice President and Secretary of the University