

THE UNIVERSITY OF MICHIGAN

Regents Communication

ACTION REQUEST

Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

David Gerdes, Ph.D., Arthur F. Thurnau Professor, professor of physics, professor of astronomy, chair, Department of Physics, College of Literature, Science, and the Arts, and interim chair, Michigan Society of Fellows, retired from active faculty status on February 28, 2025.

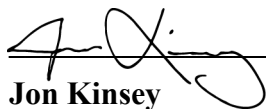
Professor Gerdes received his B.A. degree from Carleton College in 1986, a Master of Advanced Study in Mathematics from Cambridge University, England, in 1987, and a Ph.D. from the University of Chicago in 1992. He joined the University of Michigan Department of Physics as a research fellow in 1992. He was an assistant professor of physics at Johns Hopkins University before returning to Michigan Physics in 1998 as an assistant professor. He was promoted to associate professor in 2002 and professor in 2008. In 2016, he became a professor of astronomy. He served as physics chair from 2019-2025; in 2024-25, he was also the chair of the Michigan Society of Fellows. On March 1, 2025, he was appointed dean of the College of Arts and Sciences at Case Western Reserve University.

A dedicated and admired teacher at all levels, Professor Gerdes was particularly committed to the large introductory physics courses, where he was an early leader in bringing interactive peer-instruction to formerly passive lectures. This work was honored with numerous awards, culminating in a Thurnau Professorship in 2007.

Professor Gerdes mounted innovative research programs cutting across the fields of particle physics and astrophysics. In particle physics, he was a leader in the development of b-quark tagging that led to the discovery of the top quark at Fermilab, and then created further enhancements to detector and data handling capabilities that allowed detailed studies of the new object. For this work, he was honored as a fellow of the American Physical Society in 2015. Turning to astrophysics, Professor Gerdes used the Dark Energy Survey (DES) telescope, designed to study the cosmos at large, in a novel application to find small Trans-Neptunian Objects (TNOs) at the outer reaches of our own solar system. He led a group that discovered two new dwarf planets: one that is the second most distant (known) solar system object, and one that has the orbit with highest inclination. They also discovered many Neptune trojans, and several extreme TNOs with orbital periods of thousands of years. Building on this work, Professor Gerdes and collaborators developed the DECam Ecliptic Exploration Project (DEEP) to look for TNOs at much fainter magnitudes than previous surveys and discovered approximately 2,300 new objects at the far reaches of the solar system. Professor Gerdes also worked on the New Horizons spacecraft that studied the dwarf planet Pluto and the Kuiper Belt. The International Astronomical Union recently honored his work by naming asteroid 208117 Davidgerdes.

The Regents now salute this distinguished scholar and teacher by naming **David Gerdes, Arthur F. Thurnau Professor Emeritus, professor emeritus of physics, and professor emeritus of astronomy.**

Requested by:



Jon Kinsey
Vice President and Secretary of the University

February 2025