

THE UNIVERSITY OF MICHIGAN

Regents Communication

ACTION REQUEST

Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

Patrick O. Seitzer, Ph.D., research professor of astronomy in the College of Literature, Science, and the Arts, retired from active faculty status on May 31, 2016.

Professor Seitzer received his B.S. (1974) degree from Georgetown University and his M.A. (1978) and Ph.D. (1983) degrees from the University of Virginia. He joined the University of Michigan faculty as a visiting professor in 1991 and served as an assistant professor from 1992-98. He was appointed assistant research scientist in 1999, and was promoted to associate research scientist in 2003, and research professor in 2011.

A superb astronomer, Professor Seitzer studied a range of topics, including the kinematics and formation of star clusters, orbital debris, merging galaxies, and charged-coupled device detectors and instrumentation. His research group developed innovative techniques to survey the sky for debris at the geosynchronous orbit (GEO), new tracking algorithms for spectroscopy of fast-moving targets, and a reverse time-delay integration technique that let his team survey the sky with telescope motion only at the sidereal rate. This technique improved efficiency and enhanced the signal-to-noise ratio of GEO objects in his images. Professor Seitzer played an instrumental leadership role in Project MODEST (Michigan Orbital DEbris Survey Telescope) that focused on optical studies of orbital debris for NASA. Using the University's upgraded 0.6-meter Curtis-Schmidt telescope at the Cerro Tololo Inter-American Observatory in Chile, he worked to assess the total amount of debris at the GEO—where most communications satellites are located—then followed up with spectroscopy at the 6.5-meter Magellan telescopes located at Las Campanas Observatory in Chile to characterize the targets by material. The data his team gathered was fed into NASA's public software that modeled the risk to functional satellites from debris such as defunct satellites and spacecraft parts.

The Regents now salute this distinguished faculty member by naming **Patrick O. Seitzer, research professor emeritus of astronomy**.

Requested by:



Sally J. Churchill, J.D.

Vice President and Secretary of the University

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