

Sigma XI Speaker Dr. Tony England,

“The Opportunity Cost of the New NASA”

When: March 28th, 2005

Where: Strong Hall Auditorium

Time: 7:30 p.m.

The EMU Chapter of Sigma XI and the Graduate Research Fair Planning Committee are pleased to announce that the keynote speaker for the Graduate Research Fair this year is Tony England, Associate Dean for Academic Affairs for the College of Engineering at the University of Michigan. Dr. England will speak on “The Opportunity Cost of the New NASA” at 7:30 in Strong Auditorium.



The “New NASA” is about a lunar base and the human exploration of Mars. While the likely dollar cost of these programs will be truly astronomical, certainly exceeding \$300 billion, the opportunity cost of denied NASA investments in global-scale climate science and in marketable aerospace technologies might be the greater cost to the nation. As a retired astronaut who experienced the Apollo, Space Shuttle, and early International Space Station programs, Dr. England will review the evolution of NASA’s programs, speculate about why we have the “New NASA,” explain its opportunity cost and propose an alternative that would better use our national resources as well as lead to human visits to Mars.

Dr. England received B.S. and M.S. degrees in Earth Sciences from Massachusetts Institute of Technology (MIT) in 1965 and a Ph.D. in Geophysics from MIT in 1970. He has received numerous awards, including the NASA Space Flight Medal (1985) and the American Astronomical Society Space Flight Award (1986), the NASA Exceptional Service Medal (1988), and the College of Engineering Excellence in Faculty Service Award (1995). He received two outstanding service awards from the National Research Council in 1998; was elected to the University of Michigan Society of Fellows, 2001-2005; received the University’s Harold R. Johnson Diversity Service Award (2002) and the UROP Mentoring Award (2004); and received the IEEE Judith A. Resnik Award for innovative contributions to satellite microwave radiometry (2004).

His science experience is wide-ranging. He was Deputy Chief of the Office of Geochemistry and Geophysics for the U.S. Geological Survey, was a member of the National Research Council’s Space Studies Board and served as chair of several of its committees, was visiting Professor at Rice University (1987-1988) and became Professor of Electrical Engineering and Computer Science at the University of Michigan in 1988 and Professor of Atmospheric, Oceanic and Space Sciences in 1994. He served as Associate Dean of the Rackham Graduate School (1995-1998) and became the Associate Dean for Academic Affairs in the College of Engineering in 2004. His current research concerns development of the science and technology needed to use satellite microwave radiometry for land surface hydrology in the Arctic.

In addition, he served as a NASA Scientist Astronaut during the Apollo Program (1967-1972) and the early Shuttle Program (1979-1988). During the Apollo Program, he completed Air Force Flight School and served as Mission Scientist for Apollos 13 and 16. During the Shuttle Program, he was assigned to flight-test for the Shuttle’s entry and landing system, flew as a Mission Specialist on Spacelab 2 -- a solar astronomy and plasma physics mission -- and served as Space Station Program Scientist (1986-1988). He has logged 3,800 hours as pilot – 2,000 in high performance aircraft – and 8 days in Earth orbit.

Refreshments will be served prior to the lecture

Sigma XI is the international honor society of science and engineering. Nearly 200 members have won the Nobel Prize.