

THE UNIVERSITY OF WESTERN ONTARIO DEPARTMENT OF PHYSICS AND ASTRONOMY presents

A PUBLIC TALK

THE 2001-2002 ELIZABETH LAIRD MEMORIAL LECTURE

PROFESSOR VIRGINIA TRIMBLE

University of Maryland University of California, Irvine

COSMOLOGY: MAN'S PLACE IN THE UNIVERSE

Our personal scales of length, time, and mass are very much intermediate between the enormous ones of astronomy and cosmology and the minuscule ones of atomic and nuclear physics. The speaker will attempt to indicate how this came about by reviewing the history of the universe, from the earliest times for which we have any evidence (roughly, the Big Bang) down to the birth of George W. Bush. Curiously, most of what we find depends on only about eight properties of the universe, four cosmological ones, and four physical ones (the forces of nature). One implication is that life, even planets and stars, as we are accustomed to them, would not have arisen if any of these eight numbers had been very different. Possible explanations include underlying physics still to be learned and multiple universes.



Virginia Trimble received her BA from UCLA in 1964 and her Ph.D. from Caltech in 1968. She held a postdoctoral fellowship at Cambridge Univ., from which she also received an MA in 1969. For many years she has held joint faculty appointments at the University of California, Irvine and the University of Maryland, spending 6 months a year at each.

Among other things she is currently a Vice-President of the International Astronomical Union and President of their Division on "Galaxies and the Universe". Until recently she was Chair of the Historical Astronomy Division of the American Astronomical Society. She received the 1986 National Academy of Sciences Award for scientific reviewing and is currently astrophysics editor of Reviews of Modern Physics.

Her research interests include the structure and evolution of stars, galaxies, and the universe, and the history of how we have achieved our present understanding of them.

Wednesday, October 10, 2001, 7:30 p.m. Room 55, Western Science Centre

Prof. Trimble will also give 2 other talks: Wed., Oct. 10, 1:00 pm, P&A 137, Astrophysics Faces the Millenium Thurs., Oct. 11, 2:00 pm, P&A 123, Archaeoastronomy: Past, Present, and Future