

SHORT CURRICULUM VITAE

JAMES C. MCWILLIAMS

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Research Subjects

The general subject is theory and computational modeling of Earth's ocean and atmosphere. Particular subjects are maintenance of the general circulations; climate dynamics; geostrophically and cyclostrophically balanced (or slow manifold) dynamics in rotating, stratified fluids; vortex dynamics; planetary boundary layers; planetary-scale thermohaline convection; coherent structures of turbulent flows in geophysical and astrophysical regimes; magnetohydrodynamics; numerical methods; and statistical estimation theory.

Professional Preparation

1968: B.S. with Honors, California Institute of Technology, Pasadena, CA, Major: Engineering and Applied Mathematics

1969: M.S. Harvard University, Cambridge, MA, Major: Applied Mathematics

1971: Ph.D. Harvard University, Cambridge, MA, Major: Applied Mathematics, Adviser: Prof. George Carrier

1971-74: Research Fellow in Geophysical Fluid Dynamics, Harvard University, Cambridge, MA

Appointments

1974–Present: Senior Research Scientist at National Center for Atmospheric Research, Boulder, CO

1994–Present: Louis B. Slichter Professor of Earth Sciences in Institute of Geophysics and Planetary Physics and Department of Atmospheric and Oceanic Sciences, UCLA, Los Angeles, CA

Publications

A list of publications is accessible at <http://www.atmos.ucla.edu/~jcm/>.

Honors

Fellow of the American Geophysical Union

Member of the National Academy of Sciences