James C. McWilliams

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McWilliams is a theoretical and computational oceanic scientist who has done research on many fluid dynamical topics, ranging from climate variability and anthropogenic change, to oceanic general circulation, to mesoscale eddies, and to boundary-layer turbulence. Particular topics in recent years are submesocale fronts, filament, vortices, and topographic wakes; surface gravity wave effects on currents and turbulence; and biogeochemical processes in eastern boundary currents. He received his university degrees in Applied Mathematics: a B.S. in 1968 from Caltech and a M.S. in 1969 and Ph.D. in 1971 from Harvard. After holding a Research Fellowship in Geophysical Fluid Dynamics at Harvard (1971-74), he worked at the National Center for Atmospheric Research (NCAR), where he became a Senior Scientist in 1980. In 1994 he became the Louis Slichter Professor of Earth Sciences at UCLA in the Institute of Geophysics and Planetary Physics and the Department of Atmospheric and Oceanic Sciences. He is a fellow of American Geophysical Union and a member of the U.S. National Academy of Sciences.