Llewellyn Hilleth Thomas: An appraisal of an under-appreciated polymath  

JOHN DAVID JACKSON, University of California and Lawrence Berkeley National Laboratory — Llewellyn Hilleth Thomas was born in 1903 and died in 1992 at the age of 88. His name is known by most for only two things, Thomas precession and the Thomas-Fermi atom. The many other facets of his career - astrophysics, atomic and molecular physics, nonlinear problems, accelerator physics, magnetohydrodynamics, computer design principles and software and hardware - are largely unknown or forgotten. I review his whole career - his early schooling, his time at Cambridge, then Copenhagen in 1925-26, and back to Cambridge, his move to the US as an assistant professor at Ohio State University in 1929, his wartime years at the Ballistic Research Laboratory, Aberdeen Proving Grounds, then in 1946 his new career as a unique resource at IBM’s Watson Scientific Computing Laboratory and Columbia University until his first retirement in 1968, and his twilight years at North Carolina State University. Although the Thomas precession and the Thomas-Fermi atom may be the jewels in his crown, his many other accomplishments add to our appreciation of this consummate applied mathematician and physicist.

1Based on a biographical memoir to be published by the National Academy of Sciences.