Abstract Submitted for the APR15 Meeting of The American Physical Society

Impact of WWI on Relativity and Other Sciences VIRGINIA TRIMBLE, Physics Dept, UC Irvine & LCOGT — Custom calls WWII the physicists' war (radar, nuclear bombs, rockets) and WWI the chemists' war (nitrogen fixation and synthetic fuels as well as poison gases). In fact both wars affected all of science profoundly. For us, hostilities began with the capture of Erwin Freundlich's German eclipse expedition to the Crrimea in August 1914. Curiously they had gone there to measure deflection of starlight be the sun at the half-of-GR level predicted earlier by Einstein. The end came in 1919 with the founding of the IAU (Central Powers strictly excluded; indeed Germany did not join until after WWII) and the Eddington-Dyson-Crommelin eclipse expedition that did record the deflection. In between were many deaths (Moseley and Karl Schwarzschild perhaps best know), turning of observatory optical shops to making binoculars, periscopes, etc, and twisting of careers (including probably the origin of the Hubble-Shapley enmity, when the former volunteered and the latter went directly to a job at Mt. Wilson; Lemaitre is another interesting case). There will be a small prize for the first person to identify the gentleman who refereed my second thesis paper, who served the full four years, partly in the trenches, on the German side.

> Virginia Trimble Physics Dept, UC Irvine & LCOGT

Date submitted: 22 Dec 2014

Electronic form version 1.4