

Abstract Submitted  
for the FWS16 Meeting of  
The American Physical Society

**Beyond the 2015 Standard Model: Specific possible elementary particles, plus phenomena they might explain** THOMAS J. BUCKHOLTZ, T. J. Buckholtz and Associates — We discuss a possible analog, for elementary particles, to the periodic table for elements. The analog points to specific possible elementary particles and some of their properties. The particles and some symmetries point to possible descriptions for dark matter and for the dark-energy stuff that contributes more than two-thirds of the density of the universe, bases for changes in the rate of expansion of the universe, and bases for other elementary-particle and cosmology phenomena. The mathematical basis features solutions to equations involving isotropic pairs of isotropic quantum harmonic oscillators. A subset of the solutions correlates with all known elementary particles and some of their properties. Other solutions point to possible elementary particles and some of their properties.

Thomas J. Buckholtz  
T. J. Buckholtz and Associates

Date submitted: 21 Aug 2016

Electronic form version 1.4