

Abstract Submitted  
for the TSF21 Meeting of  
The American Physical Society

**Explaining Exaggeration of Graphic Scale for Fuzzy Balls and Electron Distributions**<sup>1</sup> ARNO VIGEN, None — Today's textbooks have fuzzy balls and fuzzy longitudinal rings. This presentation walks through the calculation of radial electrostatic versus 'extra  $1/r$ ' pendulum calculations to show the vast exaggeration. The effective range for electron movement is  $1/1,000$  less than the textbook, so  $<20*r_e$ , not 10% or 20% of  $18,778*r_e$  ( $\alpha^2$ ). By calculating the net acceleration of positions at 1-radius, 2-radius off 'center', the pendulum size gets so limited.

<sup>1</sup>None

Arno Vigen  
None

Date submitted: 17 Jul 2021

Electronic form version 1.4