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A Classical Model of Helium JAMES ESPINOSA¹, Rhodes College, JAMES WOODYARD, West Texas A&M University — We present a preliminary model of the Helium atom that stays within the Newtonian framework. The three body Coulomb problem is greatly simplified by taking into account the delayed action at a distance character of the electromagnetic force. This time delay is amply represented by our modified Ritzian force law between two charged particles. In addition, we will use chemical and scattering data to arrive at a pictorial model of the atom. From this mechanical picture we will derive its stability, the magnetic properties, ground state energy, and spectra of Helium. We will conclude with a series of models that will be used for the rest of the noble gases.

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