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Six Not-So-Hidden Field Dimensions TERRENCE MCGRATH, Elemetric LLC — We propose a new approach to the fundamental description of fields. By expanding Bohm's spherical potential well to include six separate but related wave generators to represent nuclear matter, a new model for the mechanism underlying the generation of fields is introduced. In so doing a radically new organization to particle fields is revealed. The proposed model relates atomic to nuclear physics, providing a new starting point for the full description of atoms. Treating the nucleus as a spherical potential well produces a real wave-based spherical metric structure containing useful subtleties in discussing symmetry, coherence, organization, segregation, and locality. The spherical potential also provides a wave-based description for infinite fields and lattice regularization limits while identifying the central starting point for local field generation within the atom. Because six radiative electromagnetic components are used to replace the six-plus hidden dimensions of string theory we are enabled to describe fields in terms of Cartesian coordinates, time and six-plus wave components.

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