## The Isotopic Integrity of the Full-Length Higgs Yang-Mills Model

J. D. Martinez

## **Abstract**

We investigate the existence of a non-perturbative solution of the full-length Higgs model in the presence of gravity. In particular, we study the effects of a scalar field on the Higgs condensate, a weakly non-local field, and a weakly local field. We find that the scalar field, in the presence of gravity, is always the one that minimizes the momentum of the Higgs condensate and is therefore always the lowest energy state of the Higgs condensate. We solve the equation of state condition and find the weakly local field. We also present the result that the Higgs condensate is always the one that is of the lowest energy state and that the Higgs condensate is always the one that minimizes the momentum of the Higgs condensate.