SES12-2012-020029

Abstract for an Invited Paper for the SES12 Meeting of the American Physical Society

## The Higgs Particle and the Destiny of the Universe HARRISON PROSPER, Florida State University

On July 4th 2012, scientists at the European Laboratory for Particle Physics announced the discovery of a particle with properties consistent with the elusive Higgs boson. If the particle is indeed the Higgs boson, its discovery would be the most significant event in the field of high energy physics in more than forty years. In this talk, we shall answer the following questions. What is the Higgs boson? How did we look for it? What did we find? Why is it important? Along the way, we shall provide a panoramic view of our current understanding of matter, energy, and forces and end with a discussion of how the destiny of the universe is linked to this most mysterious of particles.