

Abstract Submitted  
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**Gravitational Origin of the Higgs Boson Mass** F. WINTERBERG,  
University of Nevada, Reno — With a positive-negative Planck mass plasma vacuum  
model I was able to predict a firewall at the event horizon of a black hole in a paper  
published in 2001 [1]. This same model can explain the Higgs boson as a particle  
made up from a very large positive mass ( $+10^{13}$  GeV) quasiparticle gravitationally  
interacting with a likewise very large negative mass ( $-10^{13}$  GeV) quasiparticle of this  
plasma, resulting in a spin 0 bound state of the positive and negative mass quasi-  
particles with an energy of the right order of  $10^2$  GeV to explain the Higgs boson  
mass as the positive gravitational interaction energy of a very large positive with a  
very large negative mass [2].

[1] F. Winterberg and Z. Naturforsch, Physical Sciences, 56a, 889 (2001);

[2] 69a, 220 (2014)

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