## Physics 615 Due Nov. 22, 2013 Homework #10

1 [10pts] Do problem 6.3 from Peskin and Schroeder. This problem explores whether the measured values of g - 2 places limits on the existence of possible postulated but undiscovered particles.

Assuming, of course, that the 125 GeV particle found on July 4 is the Higgs, is it possible that the latest discrepancy<sup>1</sup> in  $a_{\mu}$ , which is  $2.49 \times 10^{-9}$ , is due to the Higgs?

<sup>&</sup>lt;sup>1</sup>Aoyama, Hayakawa, Kinoshita, Nio, ar $\chi$ iv:1205.5370v3.