On New Gauge Boson Signals According to the Littlest Higgs Model in Future e+ e- Colliders

http://www.firstlight.cn 2007-06-30

There is a recent proposal of identifying the Higgs particle of the Standard Model as a pseudo Nambu-Goldstone boson. This new broken symmetry introduces new particles and new interactions. Among these new interactions a central role to get an experimental signal of a new physics is played by the new neutral gauge bosons, AH and ZH. We study the associated production of general new neutral gauge boson Z 0 and a hard photon in the process e+ +e¡ ¡! µ+ +µ¡ +g. For MAH < ps we show that the hard photon energy distribution in e+ +e¡ ¡!g + f + ¯ f can present a model dependence and establish the theoretical origin of a new possible heavy neutral gauge boson.

存档文本