



Contribution ID: 352

Type: not specified

Flavor dependent $U(1)'$ models for the top forward-backward asymmetry and W_{jj} excess at CDF

Monday, 29 August 2011 11:15 (20 minutes)

We present flavor models for leptophobic Z' with flavor dependent couplings to the right-handed up-type quarks in the standard model, which can accommodate the recent data on the top forward-backward asymmetry and the dijet resonance reported by CDF Collaboration.

Such flavor-dependent charge assignments generally require extra chiral fermions for anomaly free and extra Higgs doublets for realistic mass matrices. We also discuss the extra higgs contributions to the top forward-backward asymmetry, and notice that they may be required to avoid the constraint from the cross sections involving top quark, such as the same-sign top process. We also show that the extension could realize cold dark matter candidates.

Presenter: Dr OMURA, Yuji (KIAS)

Session Classification: Parallel Session 3