## Supersymmetry 2011 (SUSY11)



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## Flavor dependent U(1)' models for the top forward-backward asymmetry and Wjj excess at CDF

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We present flavor models for leptophobic  $\boldsymbol{Z}'$  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