Supersymmetry 2011 (SUSY11)



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Fermiophobic Gauge Bosons at the LHC

Monday, 29 August 2011 12:35 (20 minutes)

I will discuss the phenomenology of a class of models which couple new U(1) sectors to the Standard Model through triple gauge boson couplings. My primary focus will be on dimension 6 pseudovector couplings, which can arise in models incorporating anomaly cancellation mechanisms. We find the discovery reach for such a model, and find that the LHC can reach well into the TeV scale. I will also briefly discuss scalar, pseudoscalar, and vector three boson couplings, and how event topology can be used to differentiate between these models.

Presenter: Mr YAYLALI, David (University of Hawaii Department of Physics and Astronomy) **Session Classification:** Parallel Session 3