

WGIII – Resonances

Kevin Black
Tao Han
Sabine Riemann
Tom Rizzo

Charge of the Working Group

- “The question that we are asking for the LHC is how much one will know with 1 - 10 fb⁻¹ of data in different scenarios, i.e. how much will one know about new observed states (their mass, couplings, spin, quantum numbers, etc.) and how much scope will there be for other new physics to hide in 1 - 10 fb⁻¹ of LHC data.” - Marcella
- How would this knowledge help us make the optimal choice for the ILC?
- For example -> assume LHC discovers ~1 TeV heavy resonance
 - Skip 500 GeV CM energy-> 1 TeV?
 - More subtle -> depending on couplings and spin could this change how you would choose to optimize the detector?

Kickoff Meeting

- Spark interest and discussion
 - Are you interested in contributing?
 - What would you like to work on?
 - Ideas on what would be interesting to look at
- Get Working – On time scale of 1 year
- Follow up meeting -> eventually leading to proceedings

Today

- Resonances in UED – K.C. Kong
- Discoveries through ILC precision measurements – Sabine Reimann
- Using Top Quarks to probe the RS model -Ben Lillie
- Search for Extra Dimensions and Lepto-Quarks in Early LHC Data – Greg Landsberg
- New (and not so new) Z' Gauge Bosons and the LHC/ILC connection – Tim Tait
- New and Old Gauge Boson discoveries in the LHC Data- Gustaaf Brooijmans
- Using object correlations to extract new physics from the LHC – Scott Thomas
- Group Discussion