

Highlights of EPS First Morning

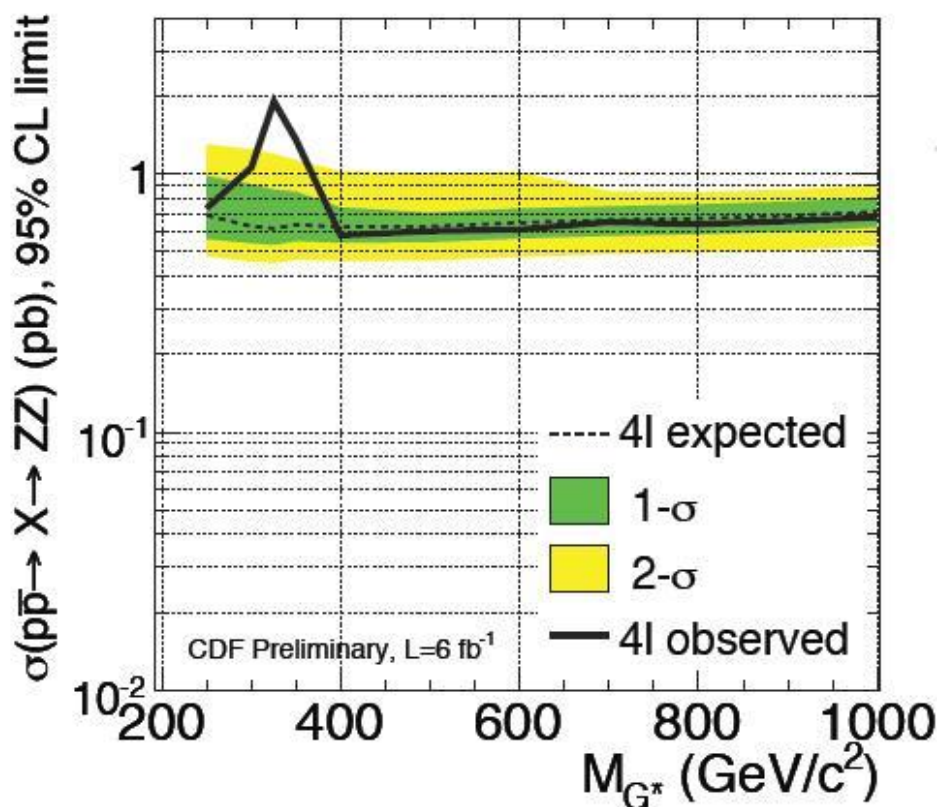
Philip E. Gibbs*

Abstract

Undoubtedly the most talked about presentation so far will be the [CDF search for ZZ resonances \(Robson\)](#) with the below striking peek at 327 GeV. This is the only talk so far that has not seen everything consistent with standard model. The talks themselves have not been broadcast so we only have the slides to go by. It would be nice to know what questions were asked at this one.

Key Words: CDF, D0, LHC, ESP-HEPS, 2011.

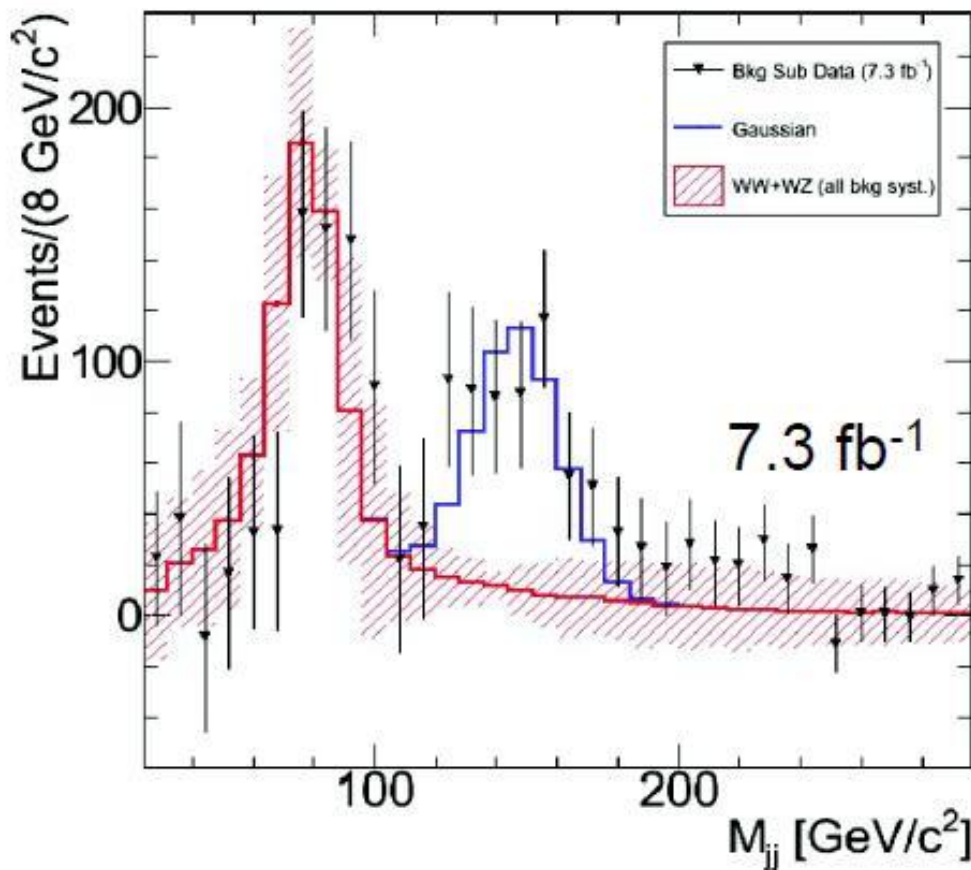
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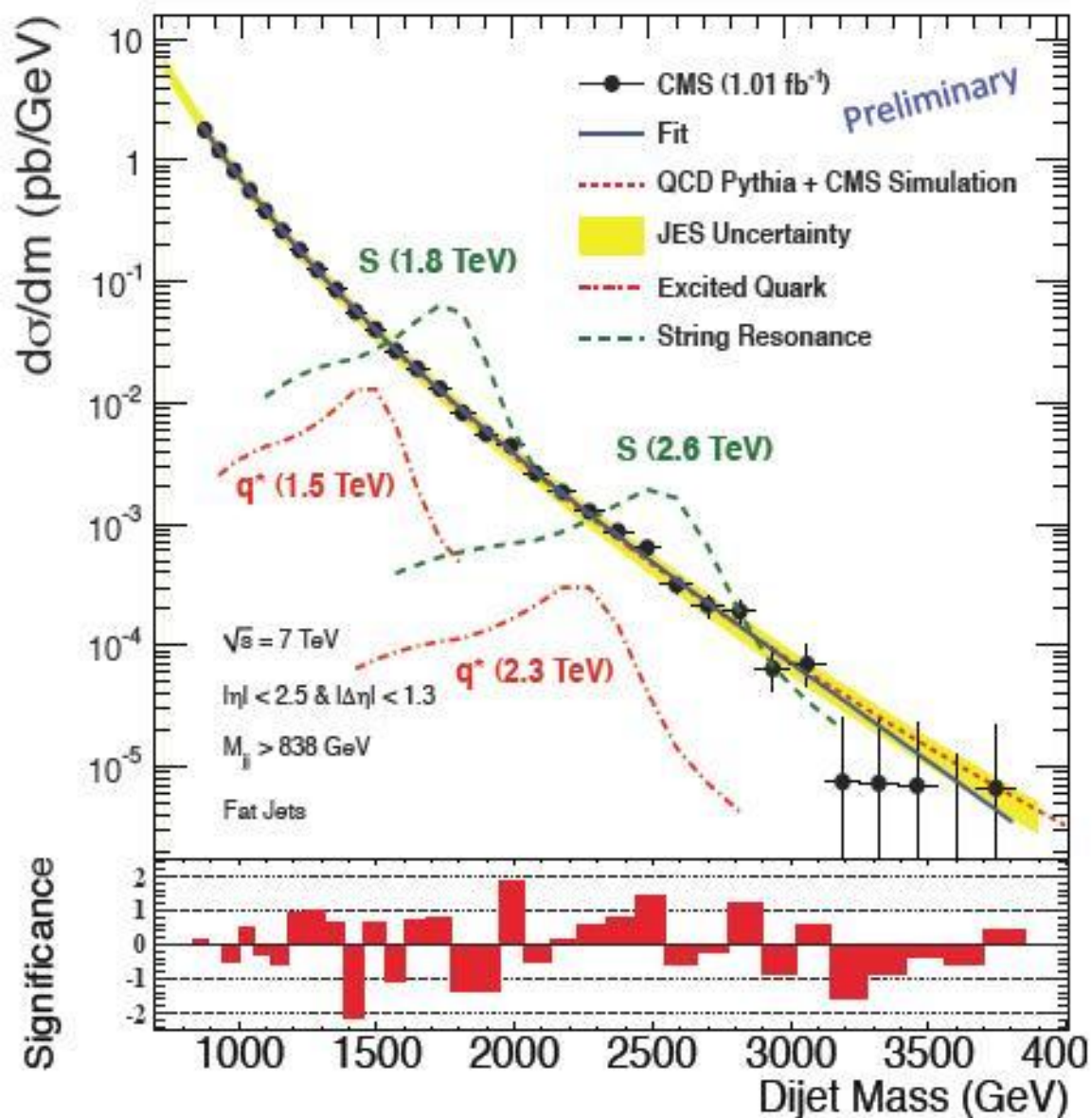
Another controversial topic that is not so new is the Wjj bump observed by CDF. This morning we had new discussions about this from [CDF \(Cavalier\) themselves](#) and [D0](#)

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[\(Sekaric\) who have refuted](#) the bump with their data. CDF points to some differences between the analysis, especially some morphing that D0 use to remove systematics. Did this remove the bump too? A task force will compare the two calculations step by step to see where the discrepancy comes from. (see also below for the ATLAS contribution on Wjj)



The first talk with all new LHC data came from Kai Yi who presented [searches for new physics in all hadronic final states at CMS](#). This included dijet resonances in 1.01/fb with nothing showing up to very high masses. A number of exotics including black holes are excluded up to one or two TeV

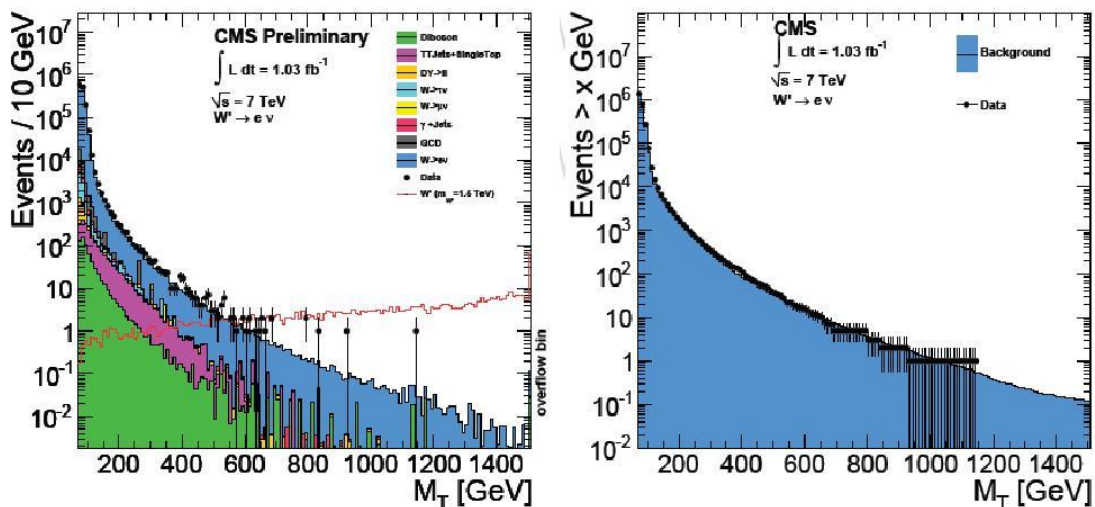


This was followed by [Gibson who provided the matching dijet resonance data from ATLAS](#) with 0.81/fb. The negative conclusion was the same.

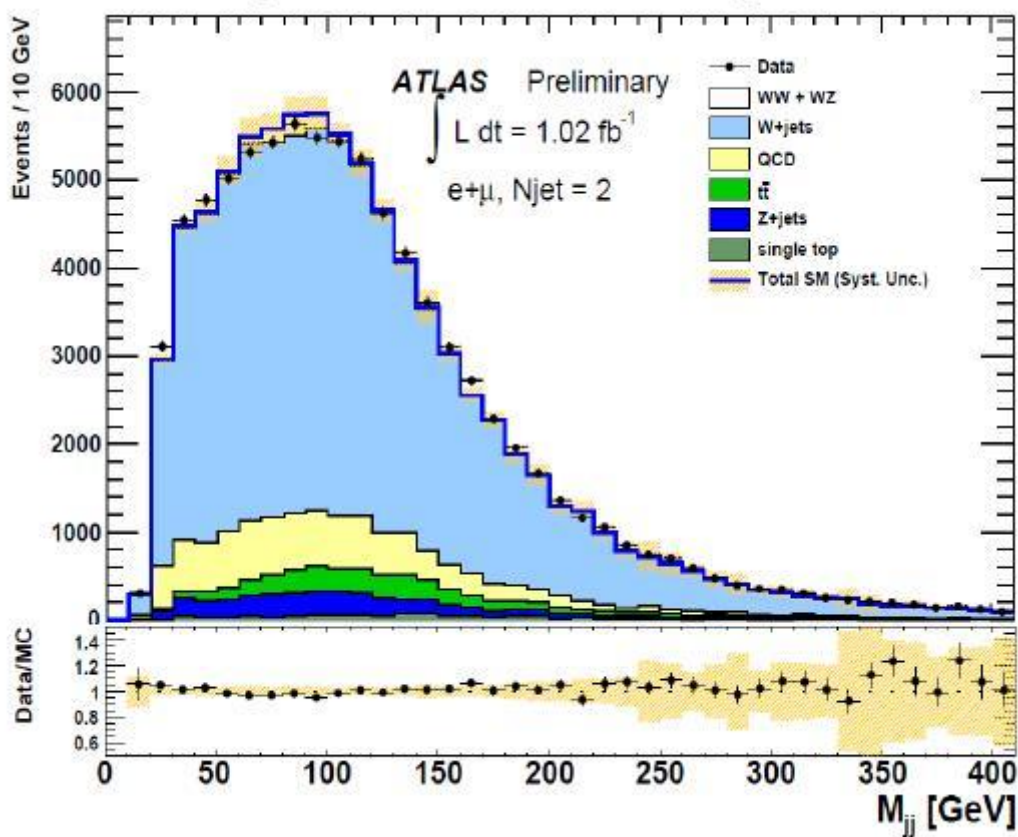
CMS returned with another null search from [leptons plus gamma presented by Leonidopoulos](#).

$e + MET$ transverse mass

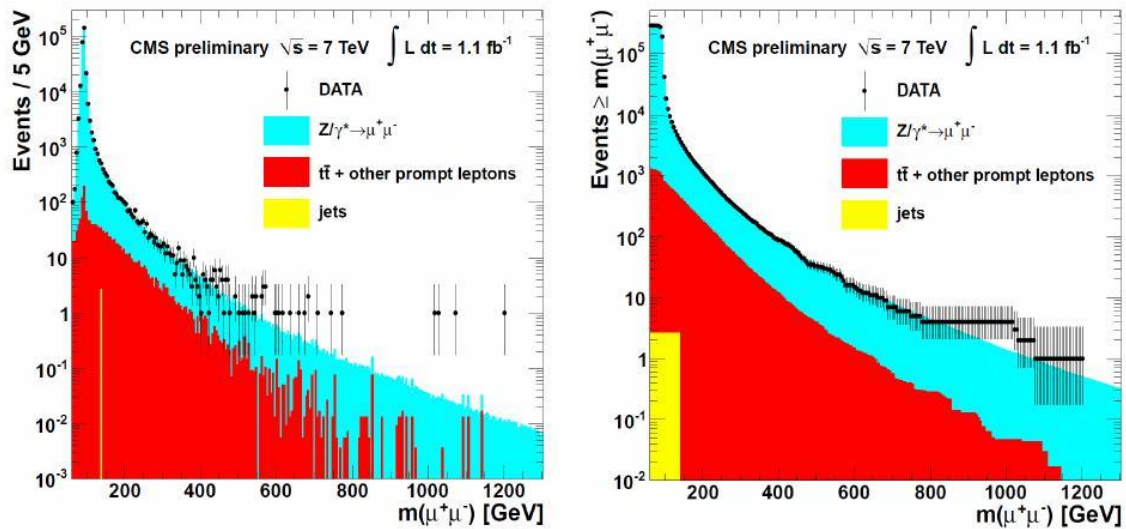
2011 analysis: 1.03 fb^{-1}



ATLAS also covered the same channel and found nothing in their [talk about exotics by Berger-Hryn'ova](#). This presentation covered a number of interesting areas but one worthy of particular note is a repeat of the Wjj search with $1.02/\text{fb}$. They found nothing so they are tending to side with D0 in refuting the bump seen by CDF



One last [search by CMS was for two electrons or muons presented by Tucker](#). As usual they produced some colourful plots but no resonances.



Although these negative search results are disappointing there is still plenty of space to find exotics with more data this year, or with more energy in a few years time. Meanwhile it is the Higgs and SUSY searches that are the most promising and those are still to come.

References

1. <http://blog.vixra.org/2011/07/21/highlights-of-eps-first-morning/>