



Status Report on Z' to Di-lepton Analysis

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Status of the analysis



- [1] I have arrived to LLR on 24/6/2014
- [2] Regarding the status of Z' to e+ e- analysis, it is in good shape
 - (a) I have participated in CSA14 exercise for high pt electrons
 - (b) computing efficiency of high pt electrons
 - (c) I will be presenting the results of tag & probe for electron ID soon
- [3] Regarding Z' to mu+ mu- analysis, this study is a bit preliminary;
 - (a) I have started this analysis 2 weeks ago with Nicola and Ahmed Fouad.
 - (b) There is existing standard code by Slava [people in Egypt and Italy are running this code and comparing results]
 - (c) This code has a <u>serious problem</u> that it is not working in CMSSW_7_X_Y [means you can not produce results for the foreseen LHC run2]
 - (d) To solve this problem I had to started coding the whole things in framework of CMSSW 7 X Y
 - (e) My code is in good shape and complete, running well in CMSSW 7 X Y, with both crab2 and crab3
 - (f) I am computing now the high pt muon ID using my code
 - (g) I am always participating in the Italian group of Z' to mu mu

Next step





- [1] Since the Higgs Hunting is almost over, Nicola is now free to give a big boost to the analysis and to the codes
- [2] We will investigate why Slava's codes, why it is not working in CMSSW70X
- [3] As soon as these troubleshooting are done we will do the serious job
 - (a) study N-1 efficiency with in CSA14 exercise
 - (b) computing Muon ID with Tag & probe
 - (c) computing fake rate
 - (d) estimating ttbar bkg using e mu method