# Status of pp Paper-Preparation

## Mahmut Özdemir

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### Done



#### > PID:

Test with ITS+TPC+TOF(ifAvailable) done.

#### Results can be found:

https://indico.cern.ch/event/369042/

#### > New AliRoot:

 Test with new Aliroot successful i.e. train jobs can be submitted with new AliRoot

### Plotting framework:

for systematic studies ready. Macro reads name of output files from .txt file and prepares inv. mass. spectrum, R factor, S/B, significance etc. automatically.



## Ongoing



- Hadron contamination (~1 week):
- Needed clean samples to find position of peaks. Clean samples studies ongoing
- Efficiency calculation (~1 week):
- Option "tuneOnData" considered (implemented in new AliRoot and works automatically.).
- Single electron efficiency can be calculated using AliAnalysisTaskSE.cxx/h.
- In AliAnalysisTaskSE.cxx, bug found which causes "segmentation violation"
- LHC12e3 (for spectrum) and LHC13f7 (for virtual photon analysis) can be used.
- For pair efficiency, charm input can be used. Also Theo's production will be tested.



## To be done



- > Cocktail:
- JIRA ticket <a href="https://alice.its.cern.ch/jira/browse/PWGDQ-15">https://alice.its.cern.ch/jira/browse/PWGDQ-15</a>
- Rejection of photon conversions
- > Reduce systematic uncertainty of the background subtraction
- Charm cross section
- $\triangleright$  Omega and phi differential cross section (as a function of  $p_T$ )
- $\triangleright$  Direct photon cross section via virtual photons (as a function of  $p_T$ )



## **Preliminary Schedule**



Plan A: paper proposal at ALICE mini week in May (if everything works properly, also cocktail)

Plan B: ALICE Physics Week (22-26 June)

Plan C: ALICE Mini Week (13-17 July)

	30 March – 5 April	6 – 12 April	13 – 19 April	20 – 26 April ALICE Mini Week	27 April – 3 May	4 – 10 May	11 – 17 May	18 – 24 May ALICE Mini Week
efficiency								
hadron con.								
pair pt cut photon con								
systematics			start to job summiting					
data tuned charm								
omega and phi					macro almost ready			
direct photon		start to write macros						
cocktail							cocktail with Drell Yan?	