PWG1 issues

Introduction

- Evolution of PWG1
- Proposal for the new PWG1 structure
- Examples of the current issues
 (and how they would map to the new structure)



Evolution of the PWG1



- From ~1996: Start of the group. Limited number of people.
 - Defining the ALICE reconstruction strategy and doing some "maths".
 - Designing/implementing the main reconstruction components.
- From ~2001: The thing goes to the detector groups.
 - First the TPC, then the ITS, the TRD, the TOF...
 - Common issues. Combined performance. PPR in 2005.
 - Monte Carlo. Basic calibration/alignment .
- From 2009 up to now: Dealing with the real data.
 - The calibration is changing all the time.
 - MC vs reality: alignment, material, primary vertex position...
 - New detectors become operational (EMCAL).
 - On the other hand: 95 people registered in PWG1, more people (from the First pp and First PbPb physics groups) are coming in.



The idea behind the new PWG1 structure



- The situation is changing fast (new data, new reco passes, new QA results, etc). To also react faster, we'd need to meet more frequently.
- The whole group (~100 people) cannot meet more than once per month (and this is not needed in fact).
- So we'd like to create a few dedicated subgroup (other PWGs have already done it). Each of these subgroup would
 - have a limited and well defined scope of responsibility;
 - have its own responsibles: new and motivated people, one closer to the detectors, another (quasi)permanent at CERN;
 - meet as often as it will be needed (EVO).
- And, we keep the spirit of the PWG1. We focus more on
 - common issues;
 - "interactions" between the detectors;
 - combined ALICE detector performance.
- And, we go on with our monthly meetings. They become "plenary" PWG1 meetings (like other PWGs do).



New PWG1 structure



- PWG1: I. Belikov, (who else)?, ...
 - QA and run conditions: A. Morsch, K. Oyama?, ...
 - <u>Calibration:</u> R. Preghenella, M. Ploskon?, ...
 - <u>Tracking/vertexing/alignment:</u> F. Prino, R. Shahoyan?, ...
 - Embedding: C. Loizides?, ...
 - Global event properties: A. Toia, M. Floris, ...
 - Event display: ?, ?, ...



Examples: issues <-> subgroups



The calibration subgroup:

- Making sure that all the calibration is ready for the next reco pass.
- Most of the cases where something "is seen in the data" but "is not seen in MC" (example: track matching with HMPID).

The tracking subgroup:

- More precise material corrections.
- Bremsstrahlung corrections.
- Low-pt tracking.
- Embedding.

The global event properties subgroup:

- Centrality selection running also on MC.
- Implementation of the event plane in a "centralized way".