Mandate of the Physics Performance & Datasets (PPD)

The Physics Validation Team (PVT) is currently a L2 activity that connects five different coordination areas: Physics, Run Coordination, Trigger, Computing and Offline. It reports to the executive board as if it were a L1 coordination area. For these reasons we are proposing that is officially become of a new L1 coordination area, called the Physics Performance and Datasets Group (PPD). The new group will also include the existing DQM, Alignment and Calibration as well as DataBase (*) groups. The PPD group will work with Physics to develop physics code and will be responsible for the validation of the physics performance of this code in generators, simulation, reconstruction, alignment, and calibration (AlCa), Data Quality Monitoring (DQM), analysis and statistics tools, as well as the trigger validation. The main deliverables of the PPD are sign-offs of the CMSSW production releases via the usual pre-production physics validation samples (relvals), stating that they are ready for deployment for MC production, prompt reconstruction, or reprocessing of data.

Production global tags and related workflows, presently delivered by the AlCa group will be the PPD group's responsibility. In addition the PPD will be responsible for the definition and validation of collision datasets for physics, and data certification. PPD will help to coordinate pile-up and time dependent MC studies and the tuning of simulation and generators for various production needs. Also the DQM GUI will be the responsibility of the PPD, while the WBM/run registry will be a joint responsibility of the Run coordination and PPD.

PPD will convene the joint PVT and Physics Operations meeting and it will continue to be the forum for DPG, POG, PAG, Trigger, Computing and Offline involvement in data taking.

The meeting will be used to discuss and communicate the necessary changes to the physics code, conditions as well as data certification. It is expected that PPD group will facilitate vertical integration from the PAGs to POGs to DPGs. The PAGs would take an active part in driving the needs and would be expected to help to provide resources to fulfill physics performance goals.

(*) Merging the database and AlCa groups

These groups are already highly coupled, and their efficiency would be improved by the combination. As the main activity of these groups is now the managing of the alignment and calibration constants and the Global tags for them. Their close interaction with physics places the new group in PPD.