
Summary of Workshop

23 Talks in 2 days:

- Thanks to the speakers for excellent presentations and content.
- Thanks to all participants for active discussions and questions.

Some personal reflections:

1) Pre-LHC $\approx$ “garage operation” (up to a few m2)

“QC” = one/few persons, paper travellers, homemade DB

LHC (and beyond) $\approx$ industrial operation (hundreds of m2)

“QC” = many distributed sites, automatic data entry, sophisticated DB

$\Rightarrow$ move to systems for quality management, need to tap **Procedures, Tools, Knowledgebase** of these systems

know what is behind acronyms: QM, QP, QA, QC, FMEA, RPN, ...

BUT ... how applicable to HEP experiments is it? $\Rightarrow$ partially, we must learn and use as appropriate

In addition, more than just for sensors, for whole experiment.

ATLAS, CMS: already going in this direction.

2) Effectiveness of QA/QC relies on **FEEDBACK** (communications both within a collaboration and between collab. and industry)

Effectiveness of DB relies on **GETTING INFO OUT**

3) Experience of previous experiments (those finished with sensor production):

- Feedback with vendor essential, testing at vendor often a necessity
- Significant problems often unexpected (packaging, cleaning, ...), take care of small details
- Schedule often forced compromises in QC

- **Double-sided sensors shown to work but single-sided easier to make, test, assemble (lesson taken by CMS, ATLAS)**

⇒ very useful to share experience, should we not review results of LHC experiments after their sensor production for next meeting?

4) Encouraging to see at this workshop:

- **New and continuing facilities for SI R&D**
- **Development of tools (both hardware and software) for research and testing**
- **Continued study (theory/phenomenology/experiment) toward understanding of silicon detectors**