Masterclass discussion

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"Hands on Particle Physics" International Masterclasses

Technical / Organisation Topics

● Central Organisation → local Organsation

- Amendment of instructions on orga-website (timing, ...)
- Advice for lecture content (e.g. simulation *are* used by scientists)
- Options of advance preparation at school?
- What else do local organizers need?

• Technical tools for measurement-website / DVD

- Clear starting point for MC-day vs. Full story "offline"
- guide through website (metro map)
- Improve technical issues on DVD (executable, order, update, movies?)
- Selection of samples (more background?, other V0 selection? ...)
- V0 finder, Root, etc...

• Video conference (most moderators beginners: great job!)

- Give problems/questions to the sites and let them answer/report
- How much physics to discuss at end of long day ?
- Keep the level understandable interesting, short answers
- Clear idea beforehand, not too many topics, strict timeline
- Preparation of FAQs, trial conference?
- Do quiz locally? Get interaction between the institutes?

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Physics topics

What works well ?

- Particle and event ID
- Concept of signal and background
- Invariant mass determination (do they understand what they do?)
- Quality criteris for tracks (CMS: 0-3)
- Students discuss like real scientists

• What can be improved?

- Training / advice for local tutors/iunstructors
- Combination of results
- (help in) Interpretation of results
- Discuss J/Psi and Z on one day?

• What can be added / extended?

- H->WW: add angular distribution to tell H from eweak WW
- Let students develop cuts?
- Give independent smaples to each site on 1 day
- Do same measurement with ATLAS and CMS
- Alice: pp + Pb Pb ?

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