

Detector Performance Status Review

Nicolo de Groot - RAL

Some excuses

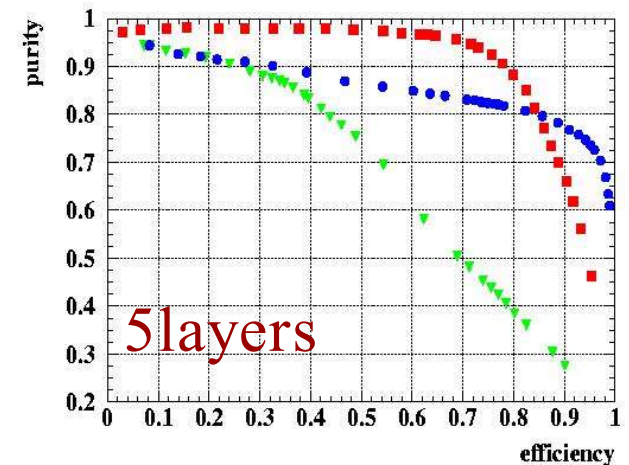
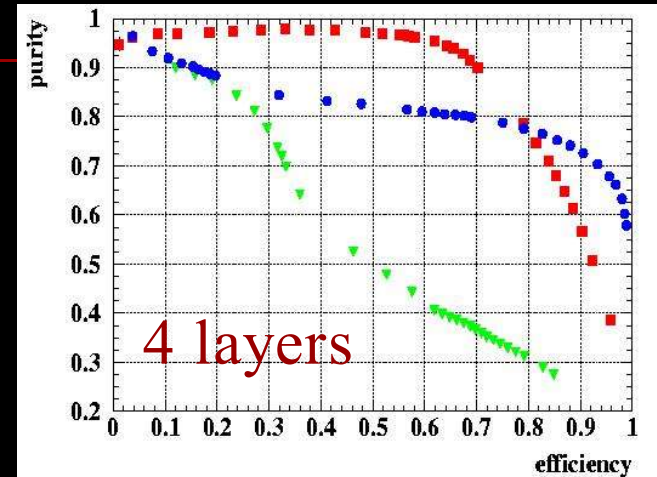
- Then there were two ... – Pascal Gay has been trapped in funding bureaucracy, Mark Thomson absent for family reasons.
- Tools in Limbo. The only thing I partly trust is Brahms. It is hard to get students and post-docs to work on a system that should disappear in a year in an obsolete language

What we should be doing

- Energy flow – Pascal's favourite
- Tracking - Silicon vs TPC, TPC + SET vs TPC only
- Flavour ID – Beampipe radius
- Particle ID – electron, muon, dE/dx

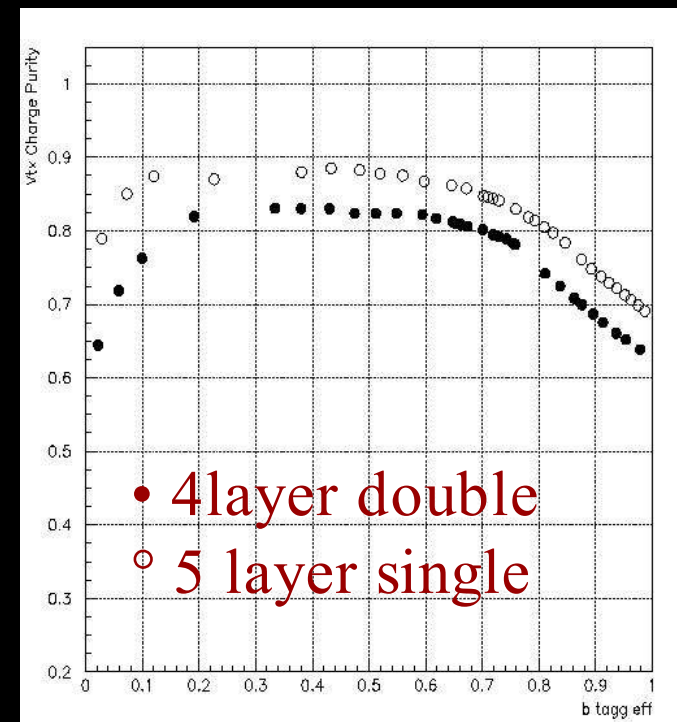
Beampipe Radius

- With current tools no noticeable difference – J. Brau
- ~25% reduction in c-tagging efficiency (T.Kuhl, NdG)
- Often the performance difference is masked by other issues (tracking, jet finding)
- Analyses now underway (A. Finch, T. Kuhl, P. Luzniak, G.Gaycken)



Quark charge

- See A. Bertls talk
- 90% purity possible for charged B's, 70% for neutral B's, VXD alone
- What can we gain from electrons, muons ?
Combined ?
- SLD Ab example



The way forward

- A usable simulation – reconstruction – analysis framework
- Development of tool frameworks
 - Compare algorithms – see Mitaroff's talk
 - Bring different detectors together
- Meet more regularly (phone/person)
- Focus on specific tasks.
- Lot of new effort 😊