

HCW09 Jet Software Tutorial



**Hadronic Calibration
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Summary

- Tutorial is not designed to be followed 'to the letter'
 - Various exercises for various levels of software expertise!
 - Some exercises are strongly suggested for everyone...
 - 'Pick and choose' what you want to learn!
- Code is committed to the SVN and tutorial is on the Twiki
 - If you don't have time to be here, you can access it from home...
 - Should remain accessible for a good while...
- Tutorial is designed for Jet code in 15.3.0
 - Even if you are an absolute expert, there are some brand new features which could be useful...

The Philosophy

- The tutorial software simply spits out a text file with various Jet quantities printed out...
- You can perform the exercises simply by flipping on jobOption switches...
 - But you won't learn much from that!
- Read the code in the source file and the jobOptions for the tutorial!
 - Each function that you can turn on and off should be thoroughly commented
- Experiment! – the examples are not extensive...

The Tutorial

- <https://twiki.cern.ch/twiki/bin/view/AtlasProtected/Lisbon2009WorkshopTutorial>

'Exercises'

NOVICE
EXPERT

- **Jets at analysis level**

- Retrieving Jets and their variables
- Jet Moments
- **Attaching JetMomentTools**
- Jet Signal States
- Jet Constituents

Not very important
for every day users,
but cute...

- **Jets at reconstruction level**

- Standard Jet Getters
- Changing the Standard Configuration
- **Overriding Tools in the Sequence**

New features for
easier configuration!

- **Jets and their calibration**

- Jet Calibrator set-up
- Jet Calibration in analysis
- Jet Calibration in reconstruction
- **Custom JetCalibSequences**
- Standard Calibration Sequences
- Re-Calibrating Jets in Data Files
- TF1Response?

Perhaps more for
developpers...

New important
feature of Jet
Reconstruction
Set-up...

'Let's be realistic...'

- We've all noticed that the connection in the meeting room is impossibly slow...
- Low attendance to the tutorial: perhaps the connection will be better?
- Otherwise:
 - We can turn this into a question/answer session...
 - I could demonstrate a few of the most interesting examples and the newest features on the main screen
- I would be glad to improvise 'exercises' on the fly if someone feels like some features of the software are missing from this tutorial!
 - For example: TF1Response for users who want to use custom calibration schemes