

Classification : What do we mean ?

- Framework designed to perform cross checks of local hadronic calibration both from MC and data

- find correlation between

- energy in clusters classified as EM

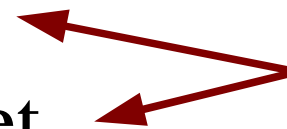
- energy of tracks assoziated to the jet

- MC truth from particle level

- MC truth from Calibration Hits

- (EM energy deposited in detector during shower)

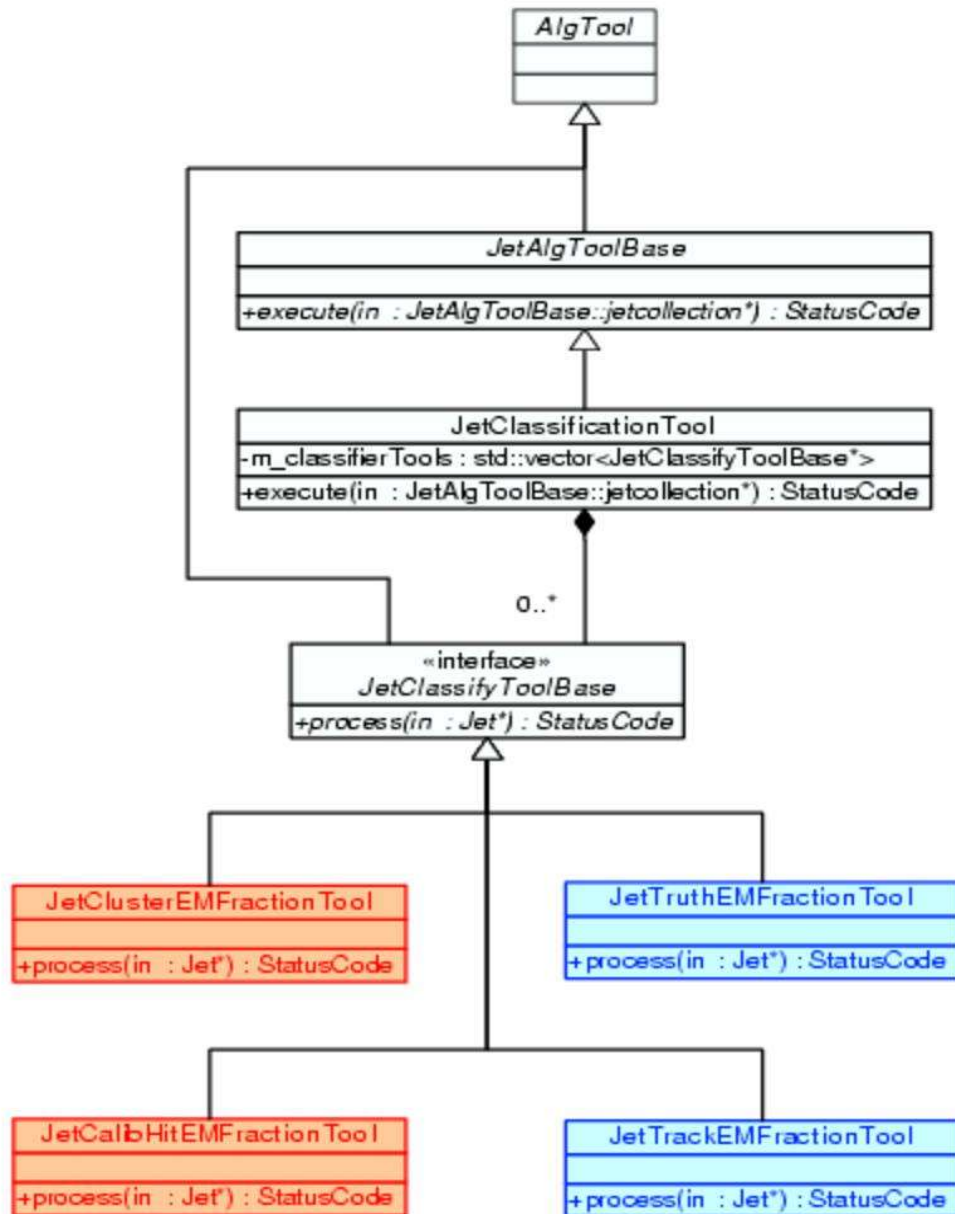
from
data, too!



Classification : What do we do ?

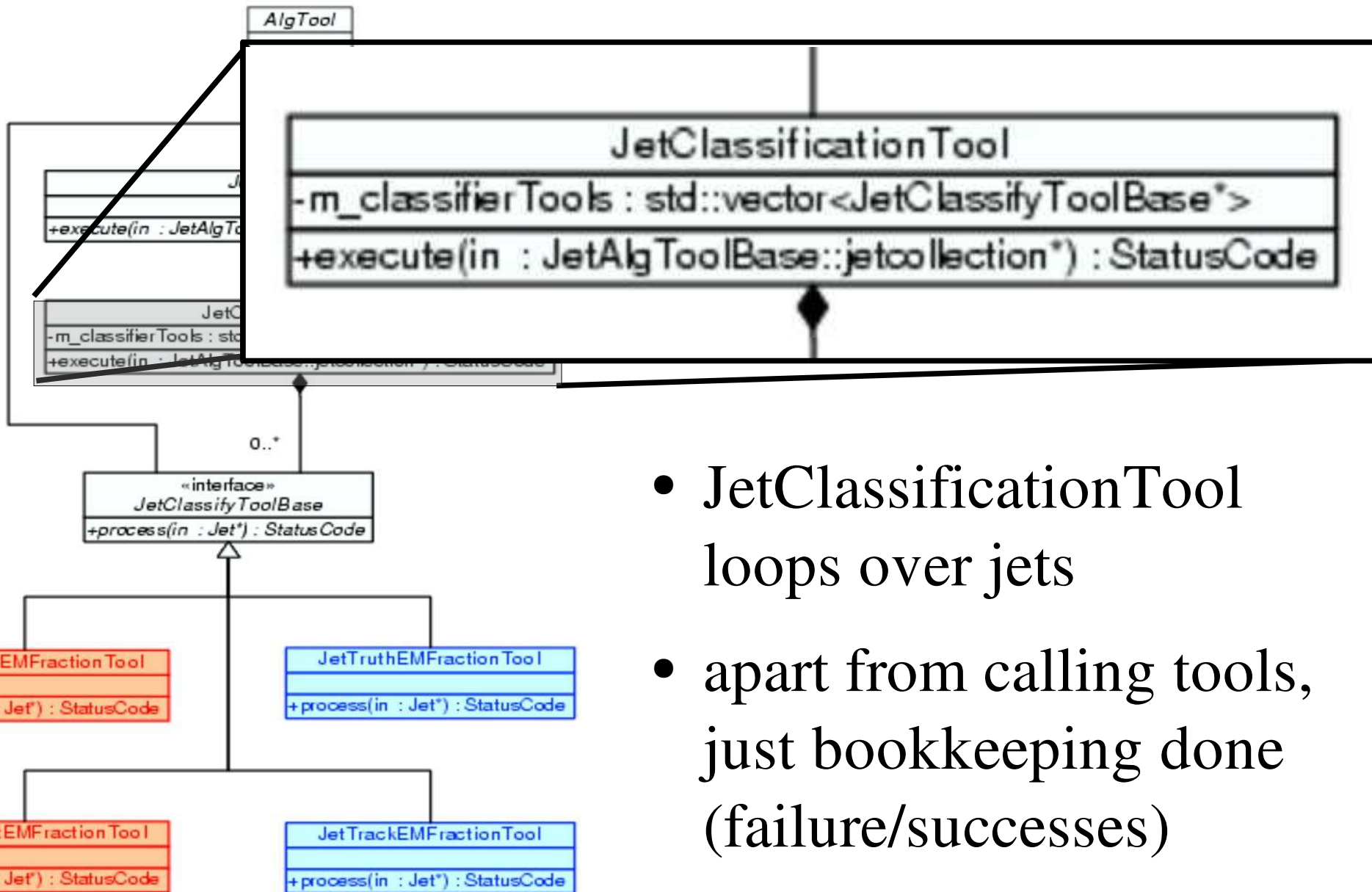
- disclaimer: code still under development,
not in cvs (yet)
- work done (28.-30.Nov.) by M.Lefebvre, P.Loch,
R.McPherson, A.Savine, R.Seuster and K.Voss
- added JetMoment(Store) to Jet class,
similar to CaloClusterMoment(Store)
- added several new classes to JetRec

Classification : Class Diagram



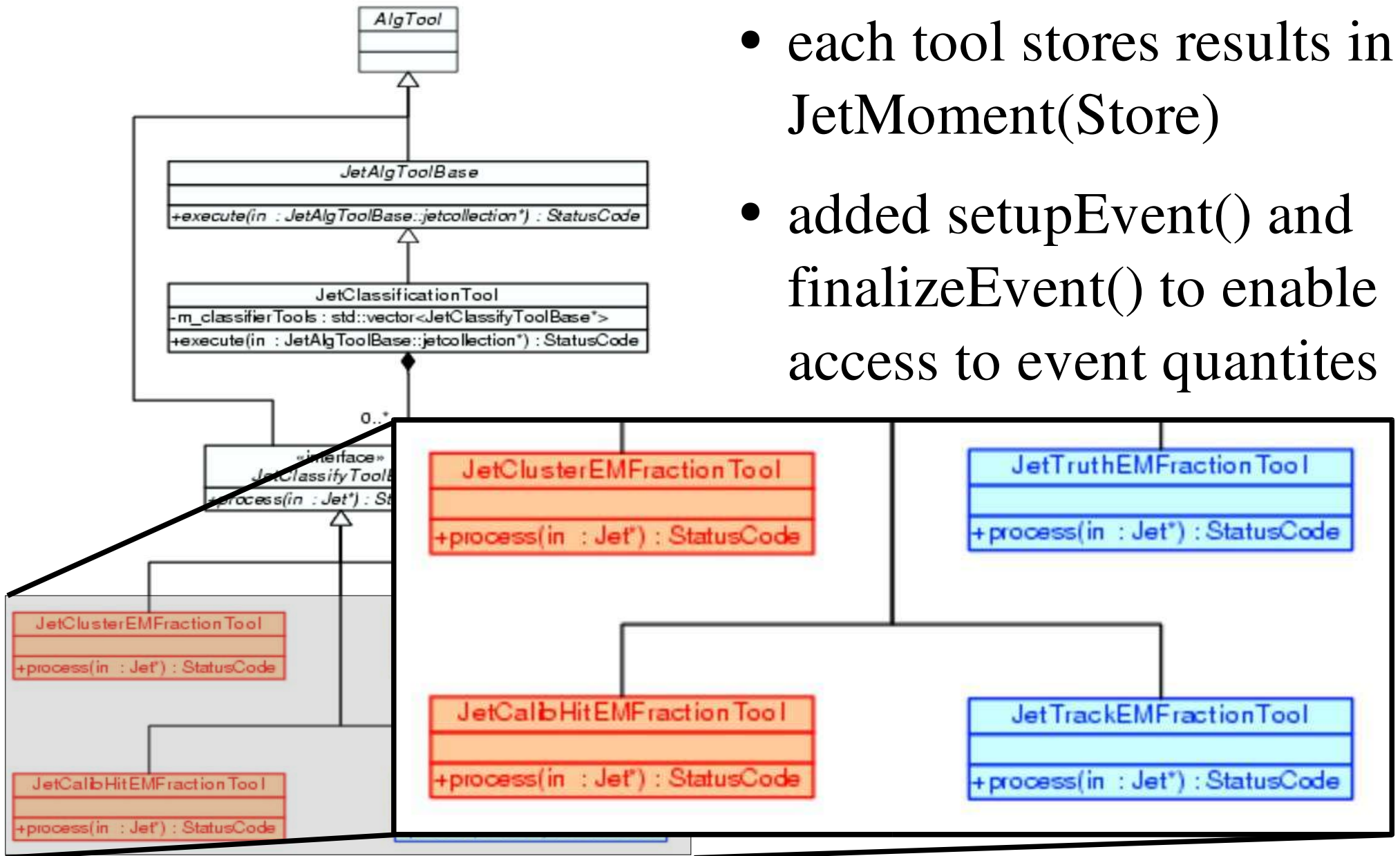
- JetClassificationTool can be called from JetAlgorithm like any other tool for jetmonitoring (later)
- via jobOptions, any other JetClassifyTool can be called

Class Diagram : JetClassificationTool



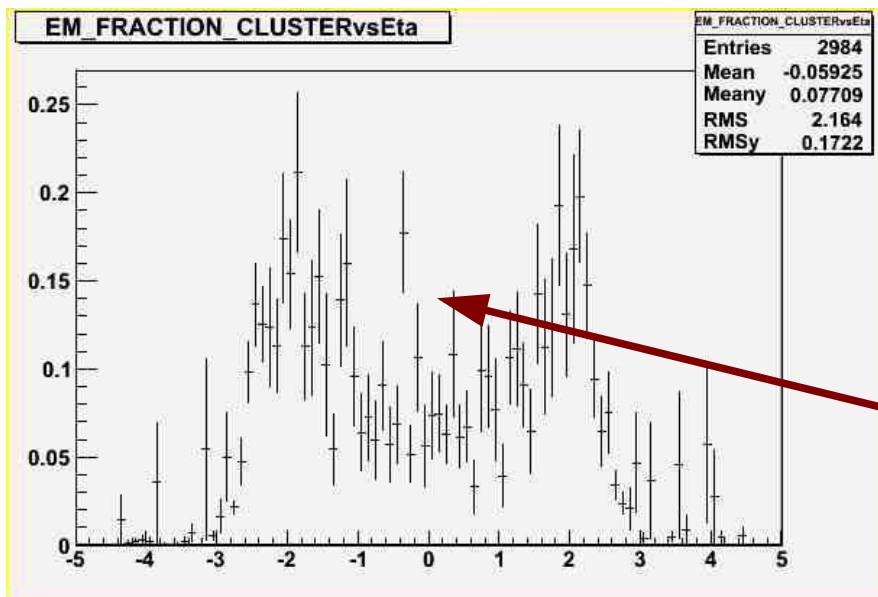
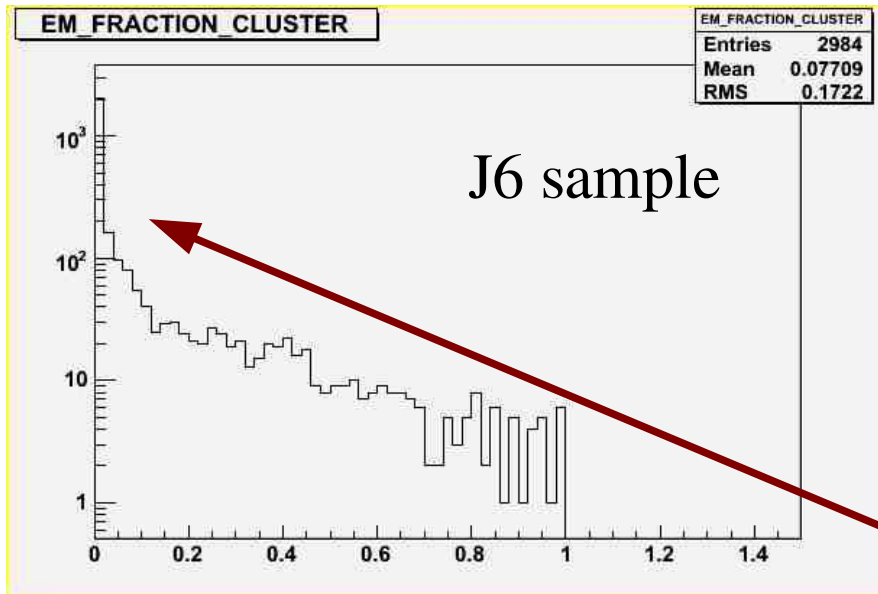
- JetClassificationTool loops over jets
- apart from calling tools, just bookkeeping done (failure/successes)

Class Diagram: JetClassifyToolBase



- each tool stores results in `JetMoment(Store)`
- added `setupEvent()` and `finalizeEvent()` to enable access to event quantities

Results: JetClassificationTool (prel.)



- so far, only 1 tool running (no correlations, sorry!)
- most jets have small fraction of clusters classif. as EM
- η dependence (?), better classification in barrel expected