PFA at MIT update

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Current status

- We have a new undergrad working with us
  - Raphael Cervantes
  - Doing the work of running jobs, tabulating results
  - Presently running sid02 HCAL −20% (32 layers) at 100, 200, 350, 500, 1000 GeV
- Ready to start on HCAL #layers vs. depth study
  - Similar to Marcel's sidish study in fall 2008
  - Bracket similar range of parameter variations
    - 30, 40, 50, 60 layers (changing thickness of iron absorber at a given lamba_iron)
    - Cover lambda_iron in steps of 4.0, 4.5, 5.0, 5.5, 6.0 total interaction length
    - Extend to 350, 500, 1000 GeV, as well as 100 and 200 GeV
    - Study some variations in cell size too
      - Investigate 5x5 mm^2 at other layer, depth values
    - Should we stick to "frozen" LOI snapshot of org.lcsim
      - Or use "moving target" at HEAD of cvs?
      - Or something else
- Ray is repeating a few runs (reported on at ALCPG 2009) at SLAC to help discover any issues that may exist with our use of calibrations, etc.
- Ray is working on getting up to speed on existing PFA code
  - Looking at both SiD Iowa PFA and PandoraPFA
  - Hope to coordinate with everyone else already working on this