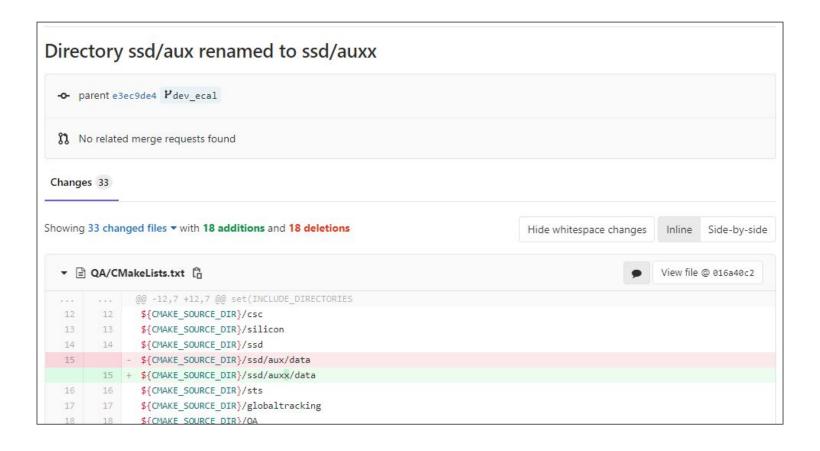
ZDC simulation

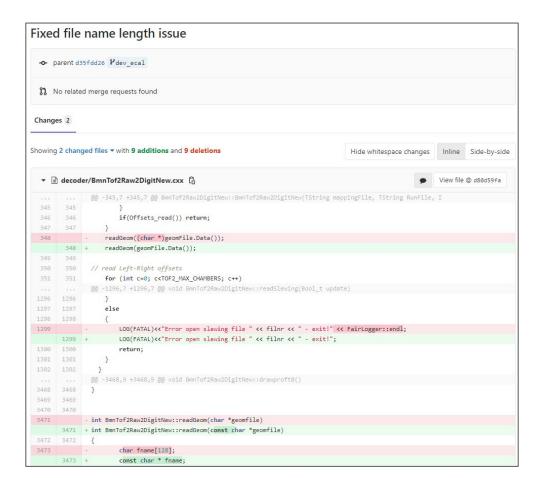
Changes to be merged into bmnroot

- Related bug fixes
 - Directory ssd/aux renamed to ssd/auxx
 - Fixed file name length issue in BmnTof2Raw2DigitNew
- Setter for Birks' constant added to BmnZdc class
- ZDC digitizer class created to be used in run_sim_bmn.C
- ZDC data analysis for event reconstruction
 - Store class BmnZDCEventData created
 - Added BmnZdcAnalyzer class to be used in run_reco_bmn.C

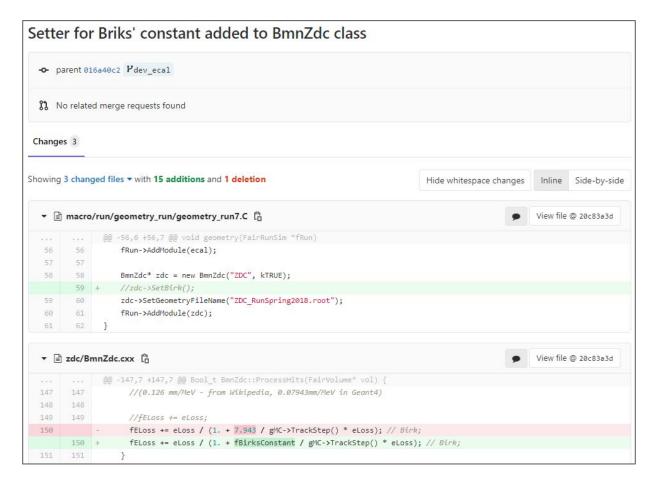
Renaming aux to aux allowed to clone bmnroot repo on Windows



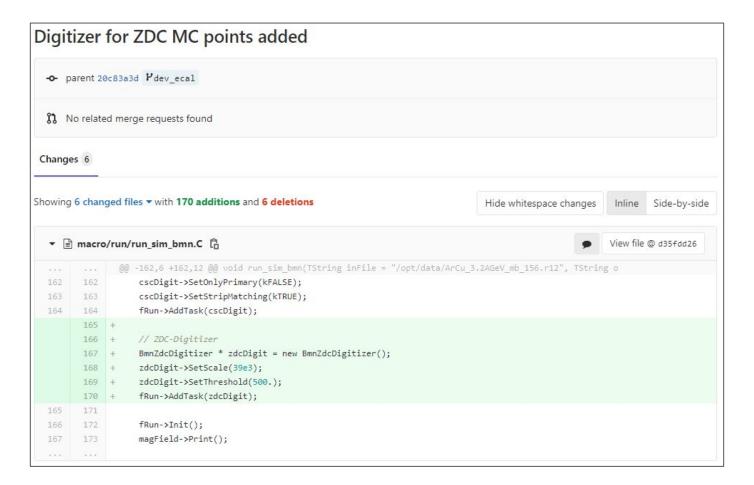
Geo file name may be more than 128 chars in BmnTof2Raw2DigitNew



It's now possible to control Birks' effect

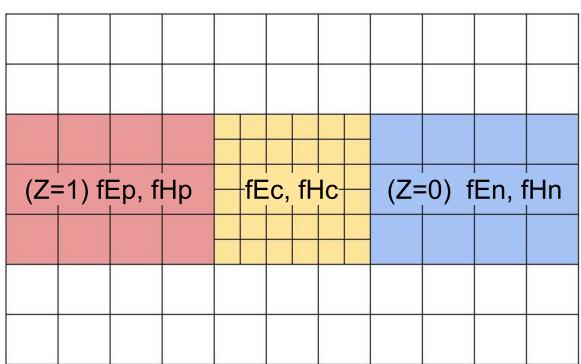


BmnZdcPoint to BmnZDCDigit converter to be used at sim time



BmnZDCEventData - data storage class added

ZDC total: fE, fH



E energy deposited (all,n,c,p)H modules triggered (all,n,c,p)

X, Y center gravity
M normalized moment

A asymmetry (2Ec/E - 1)

$$M=rac{\sum E_i r_i^2}{\sum E_i}$$

Added class BmnZdcAnalyzer to be used in run_reco_bmn.C

```
BmnZdcAnalyzer * zdcAna = new BmnZdcAnalyzer();
fRunAna->AddTask(zdcAna);
```

TODO:

- Improve BmnZdcEventData if needed
- 2. Merge this changes to origin/dev
- 3. Add parameters to BmnZdcAnalyzer