

# Semi-tauonic group meeting

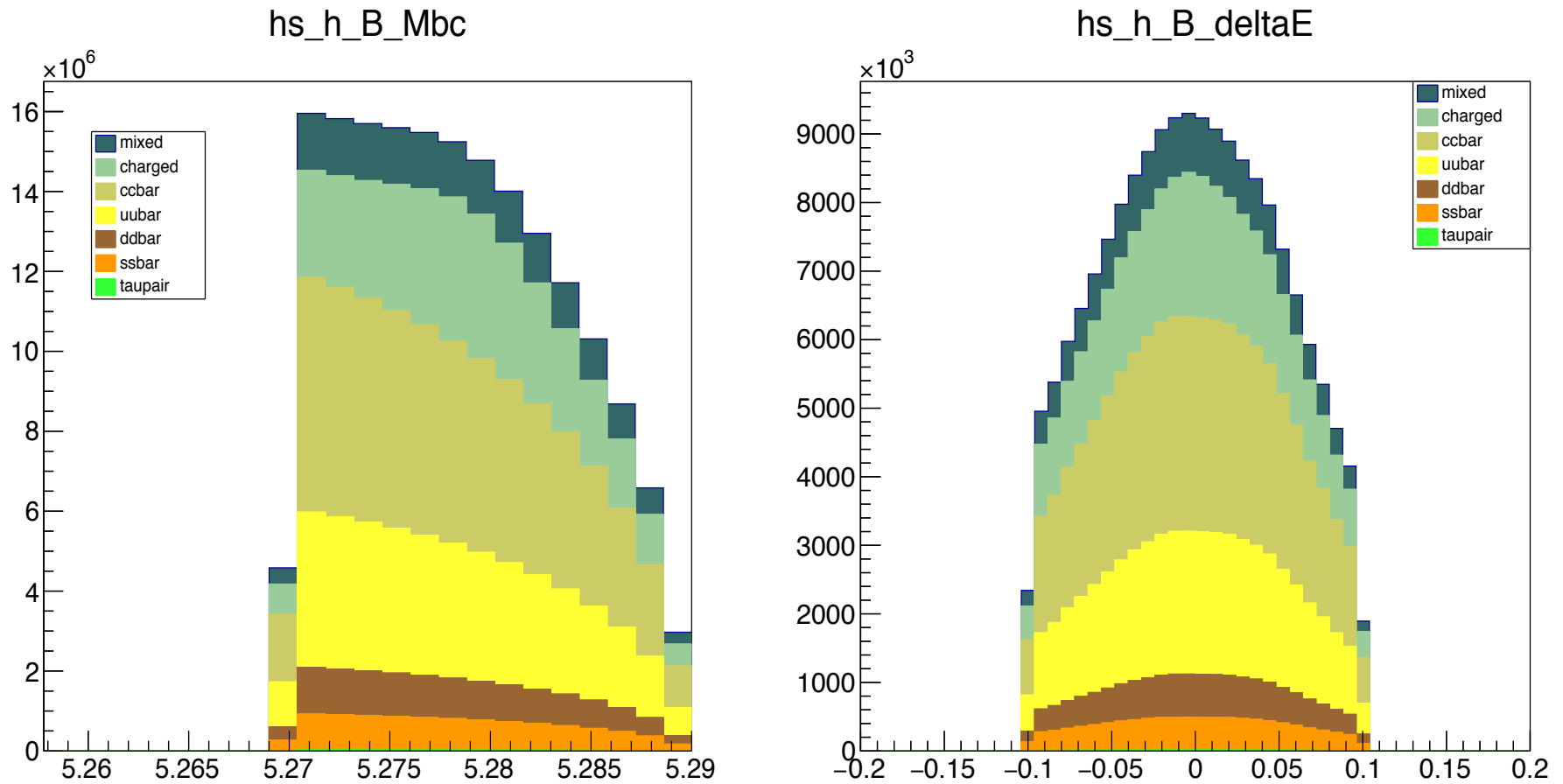
Racha Cheaib

University of British Columbia

# Analysis framework

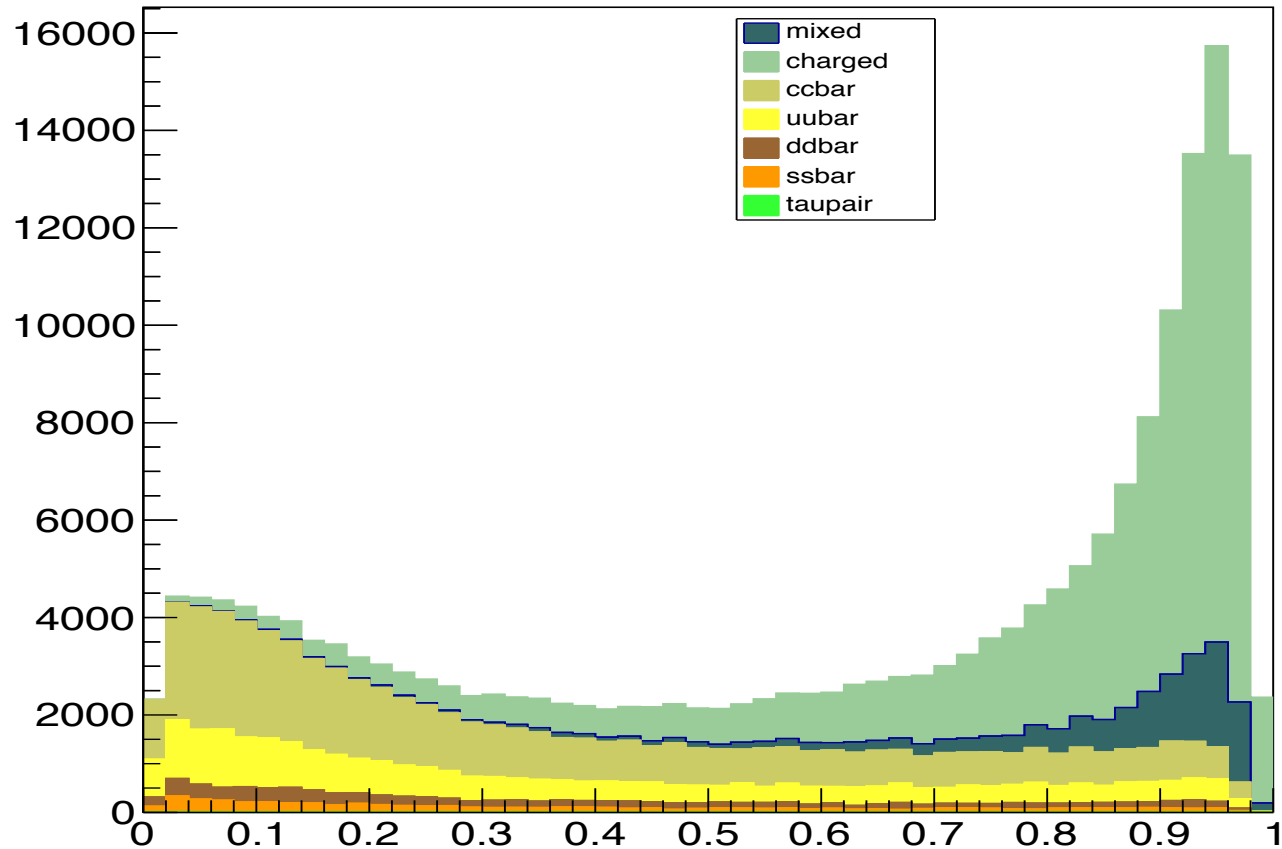
- Adjusted ntuple scripts to release-01-00-04.
- Added pMiss, q2 and M2recoil variables, as well as lepton and D multiplicity.
  - Problem with using formula() → open JIRA ticket.
- Added Tau kinematics:
  - Looks like reconstructDecay(tau → lepton) does nothing
- Those have been produced and are available under:
  - /belle/user/rachac/MC9/B0ToDstarPlusTauNu/bkgType/setp28
  - bkgType=mixedBGx1, chargedBGx1, etc..

# B+ to D0 tau nu



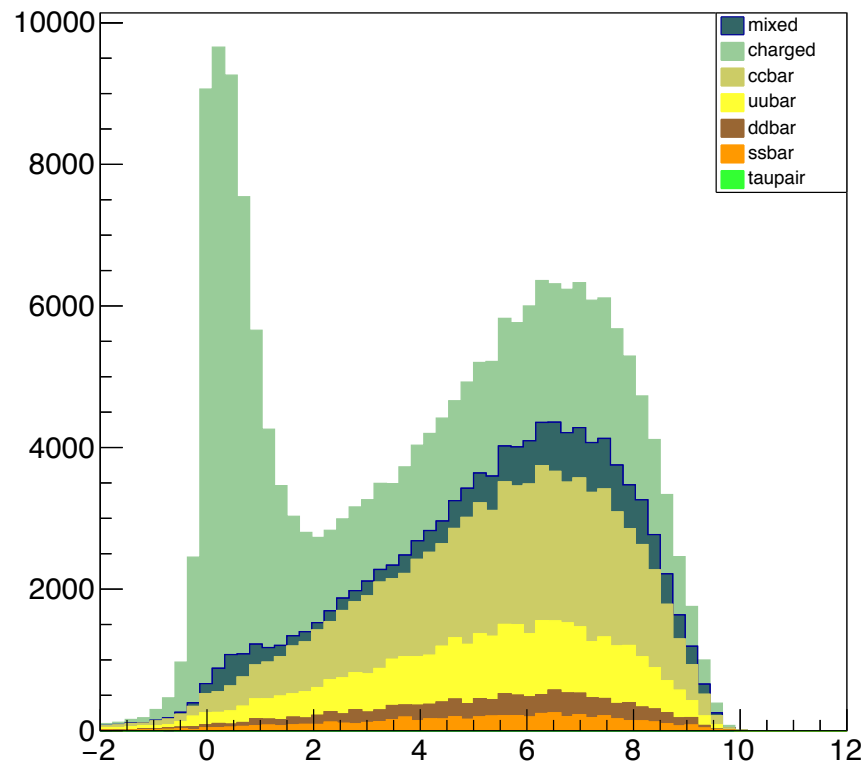
# B<sup>+</sup> to D<sup>0</sup> $\tau$ $\nu$

hs\_h\_Btag\_cs

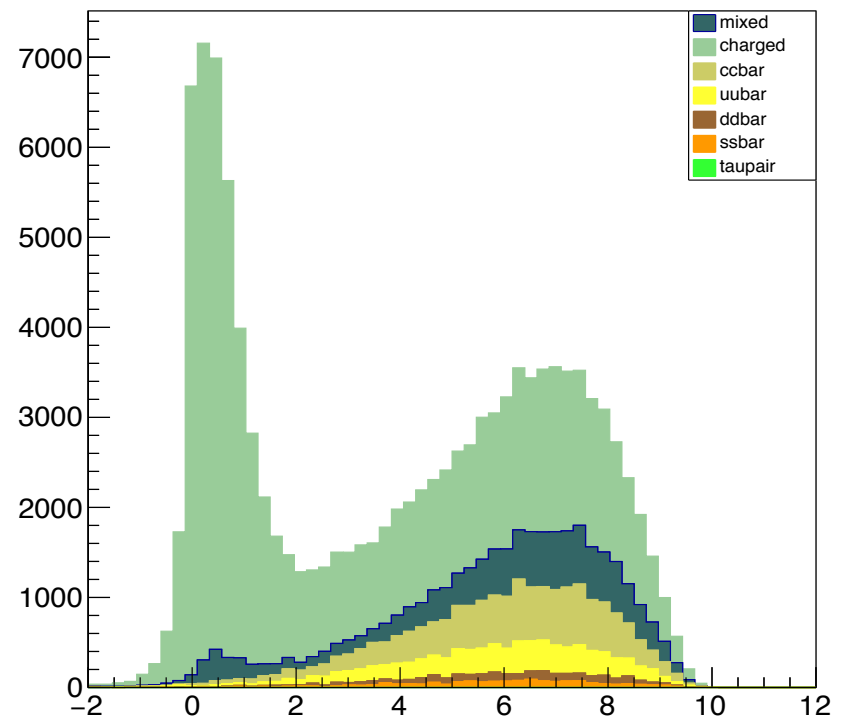


# B<sup>+</sup> to D<sup>0</sup> tau nu

Before continuum cut  
hs\_h\_Bsig\_M2recoil



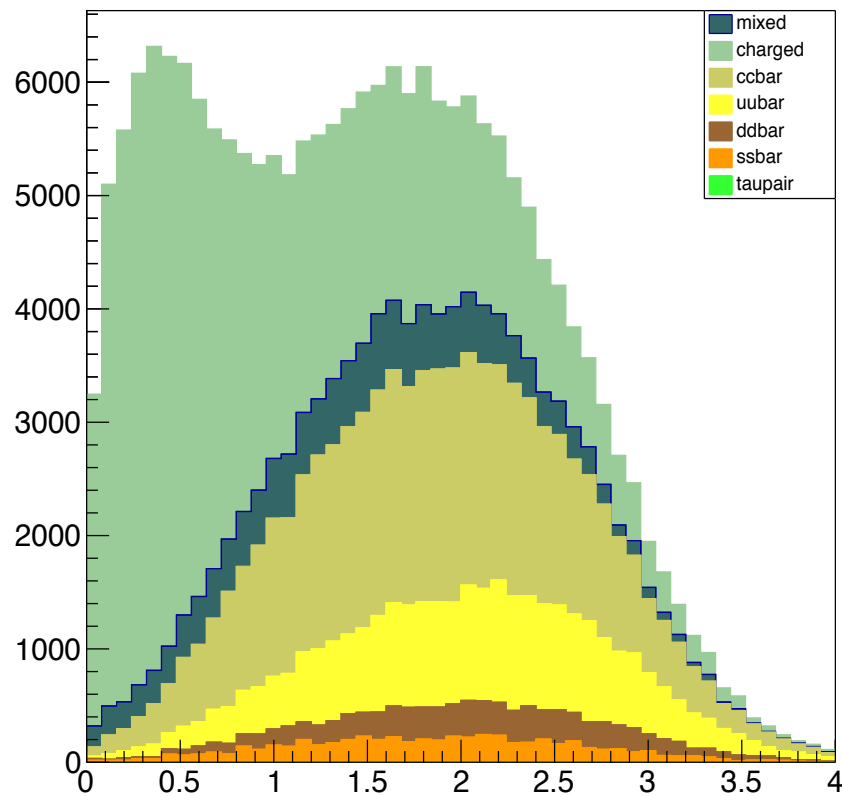
After continuum cut:  
hs\_h\_Bsig\_M2recoil



# B+ to D0 tau nu

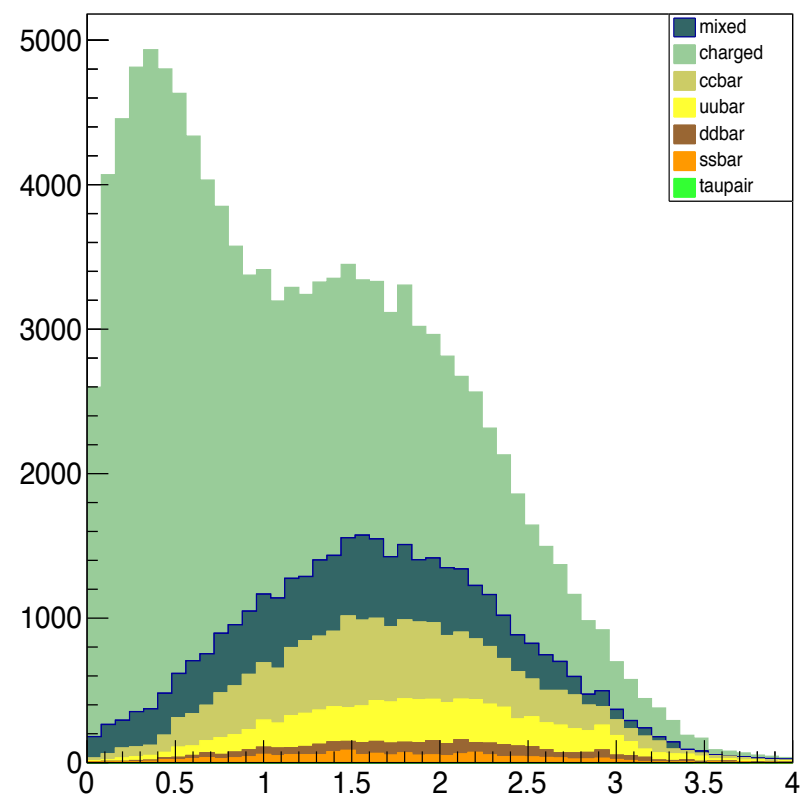
Before continuum cut

hs\_h\_Bsig\_Eextra



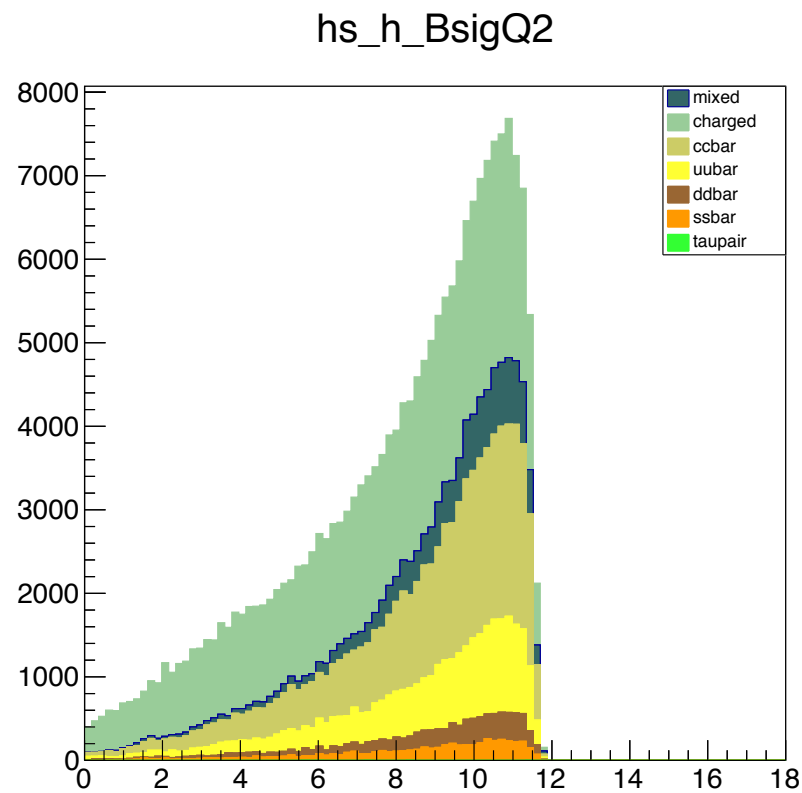
After continuum cut:

hs\_h\_Bsig\_Eextra

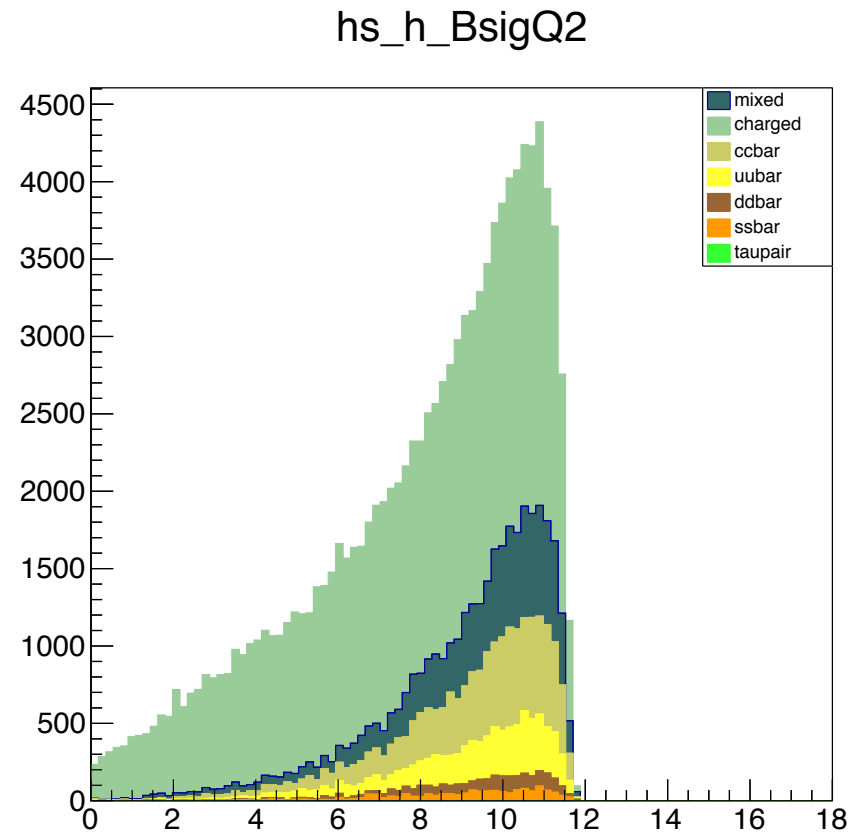


# B+ to D0 tau nu

Before continuum cut



After continuum cut:



# Coming up:

- B2GM:
  - We will have one additional working session
- Semitaucronic Hackathon: Dec. 10 – 14 th, 2018 at KIT
  - Sit in a room and work on the analysis framework
  - Preparation for Phase III