

Belle data update

All experiments of Belle

04 Jan. 2023

Cuts in the reconstruction program

- MVA photon cuts
- $1.6 < m_{\text{hadROE}} < 2.4 \text{ GeV}$

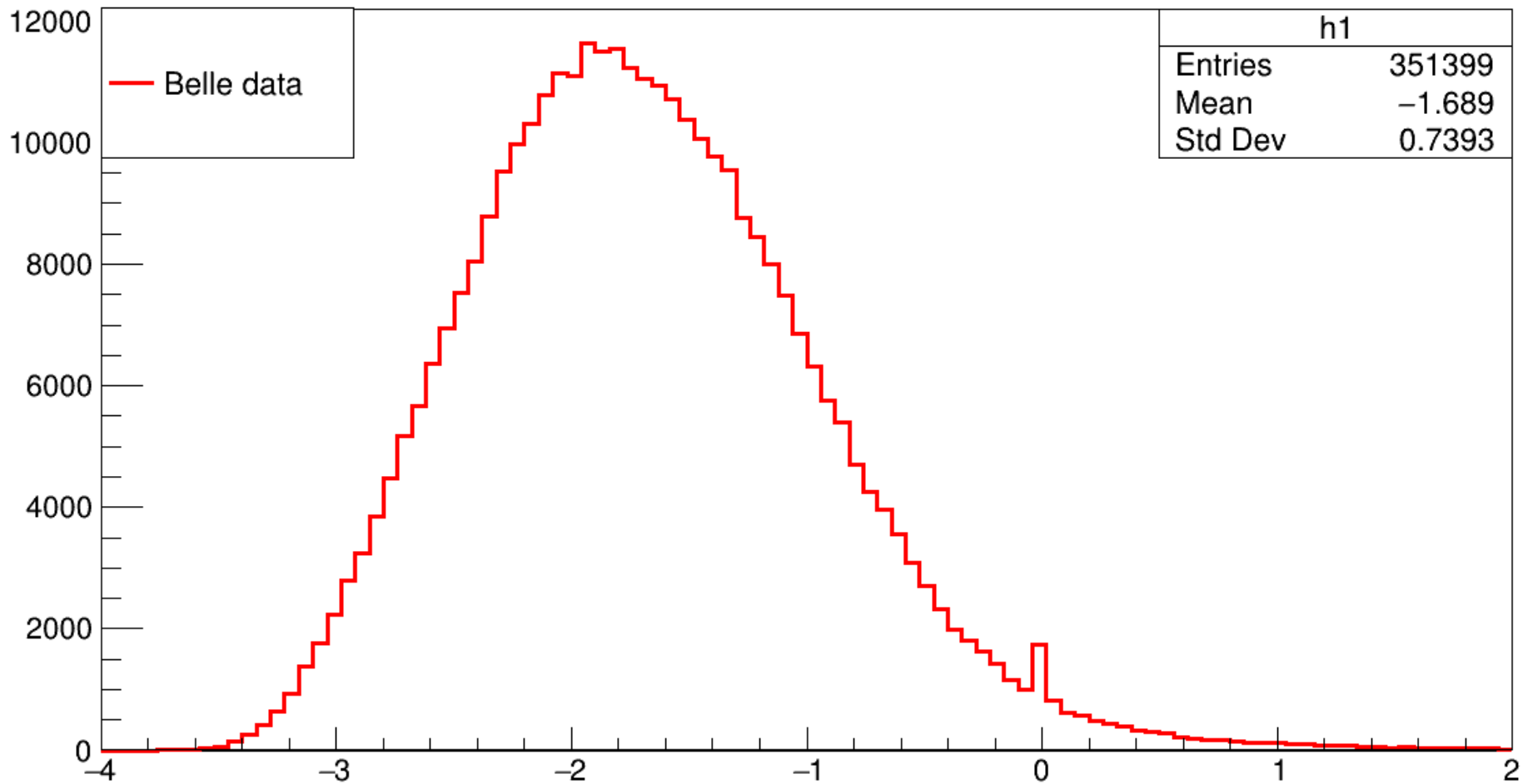
Signal side cuts (root level)

- All applied cuts are mentioned in the title of the plots.

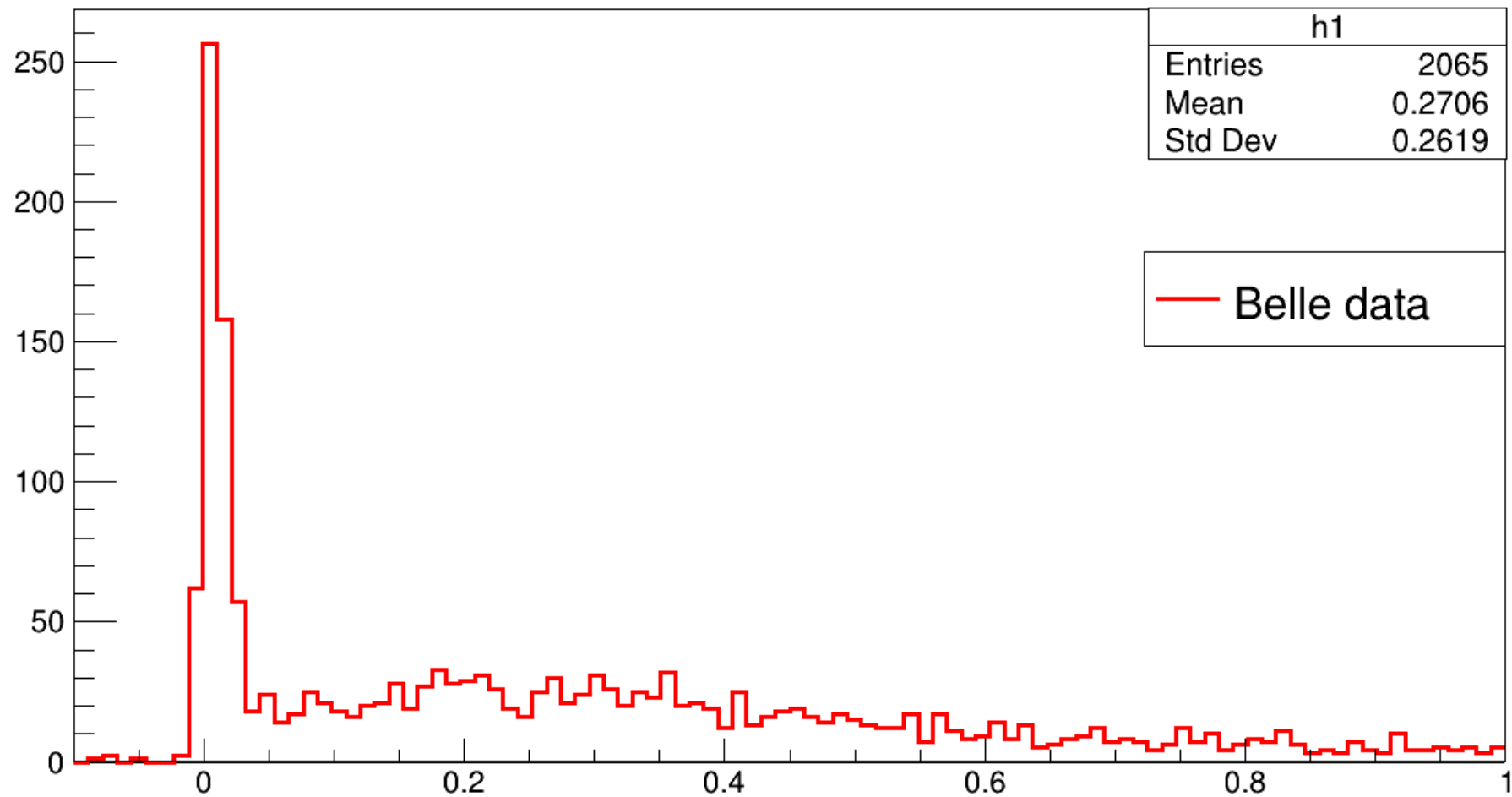
Last meeting comments

- M_{bc} and $\Delta E_{B_{sig}}$ plots.
- m_{Jpsi} with M_{bc} and $\Delta E_{B_{sig}}$ cuts and no cuts on tag side.
- $\sin\Phi$ calculation with reco. $Jpsi$ mass and PDG $Jpsi$ mass.
- Number of photons distribution with M_{bc} and $\Delta E_{B_{sig}}$ cuts.

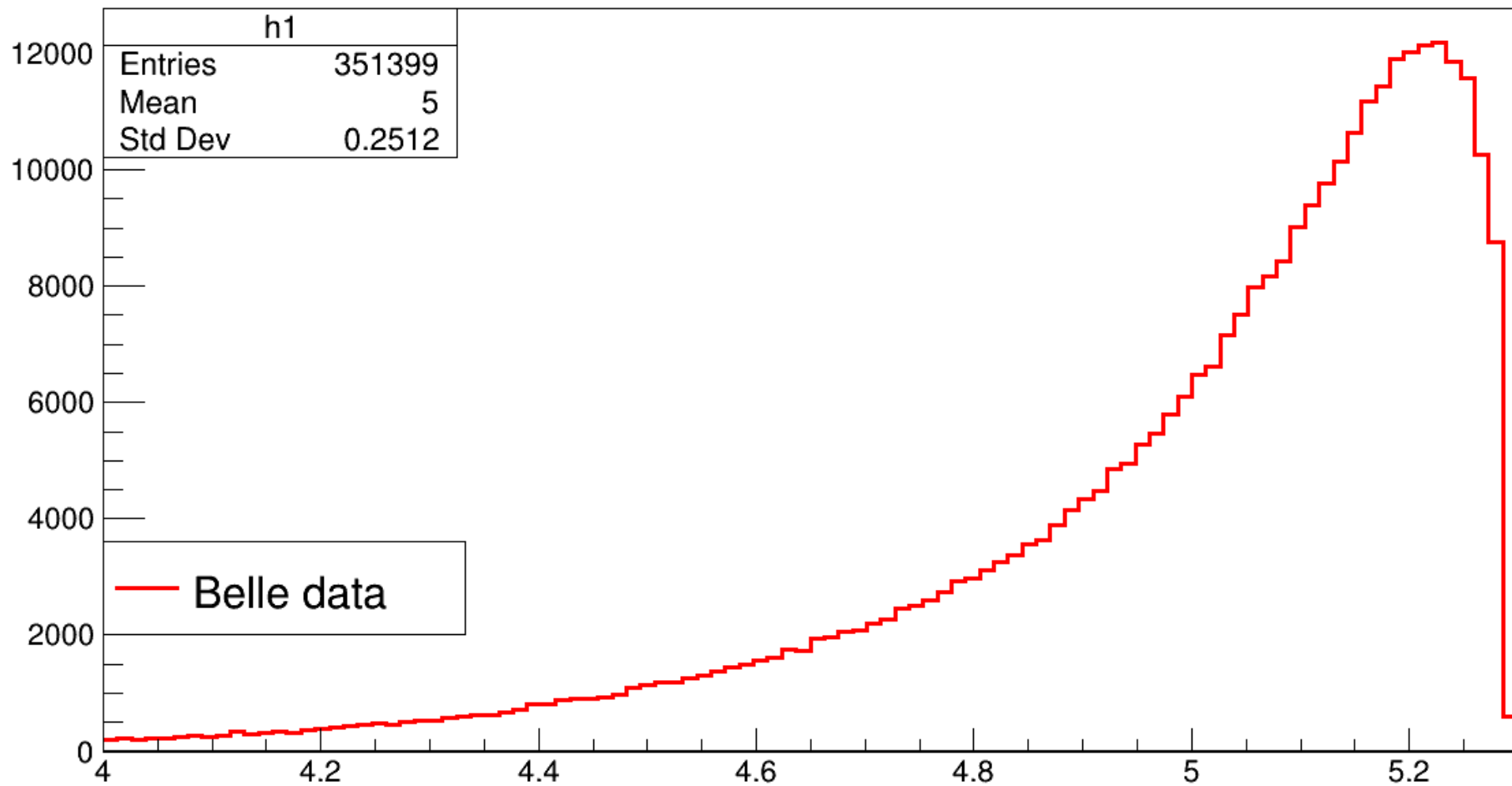
deltaE_Bsig with rank 1



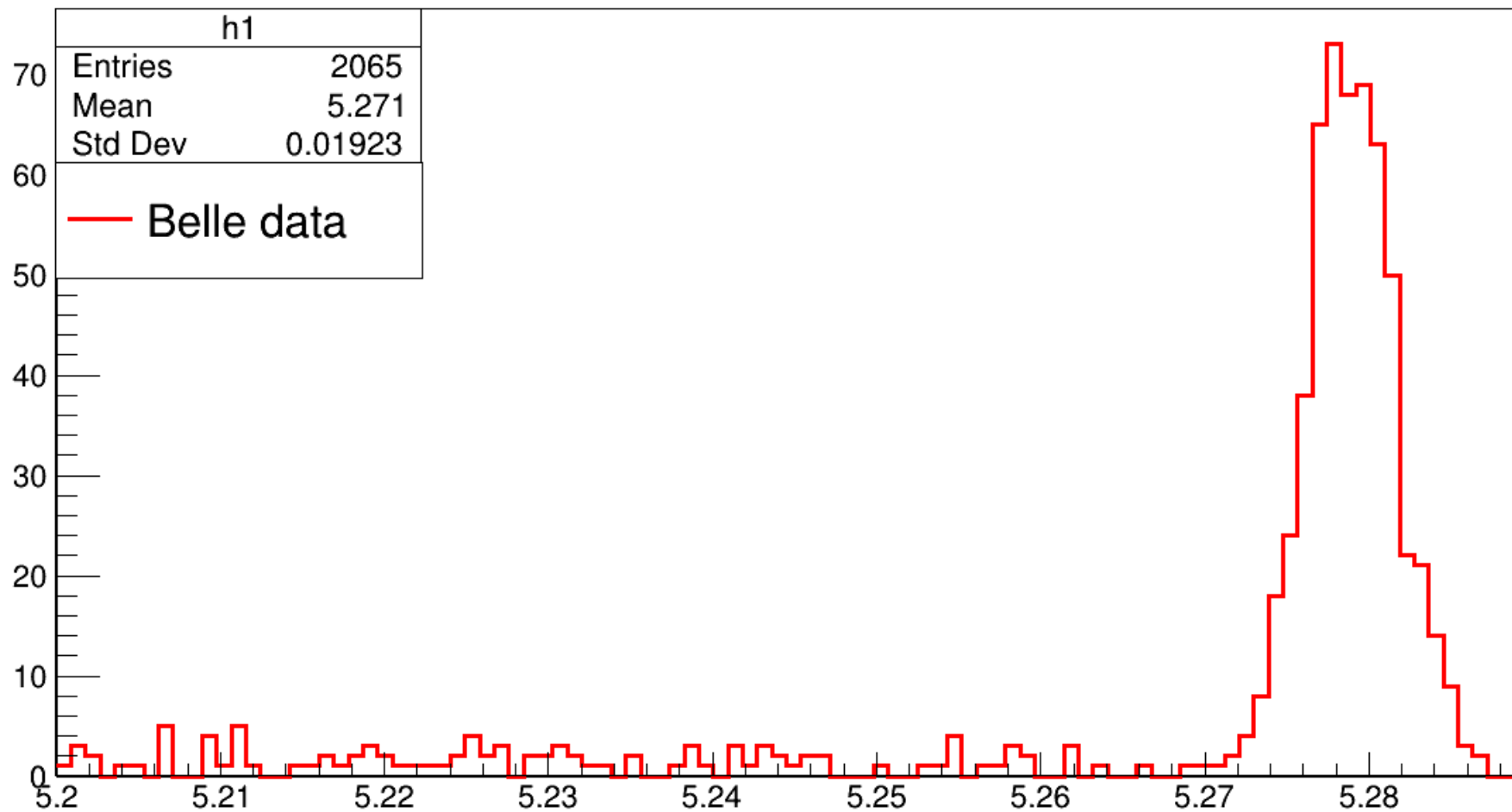
deltaE_Bsig with rank 1 and abs(sin_phi)<1



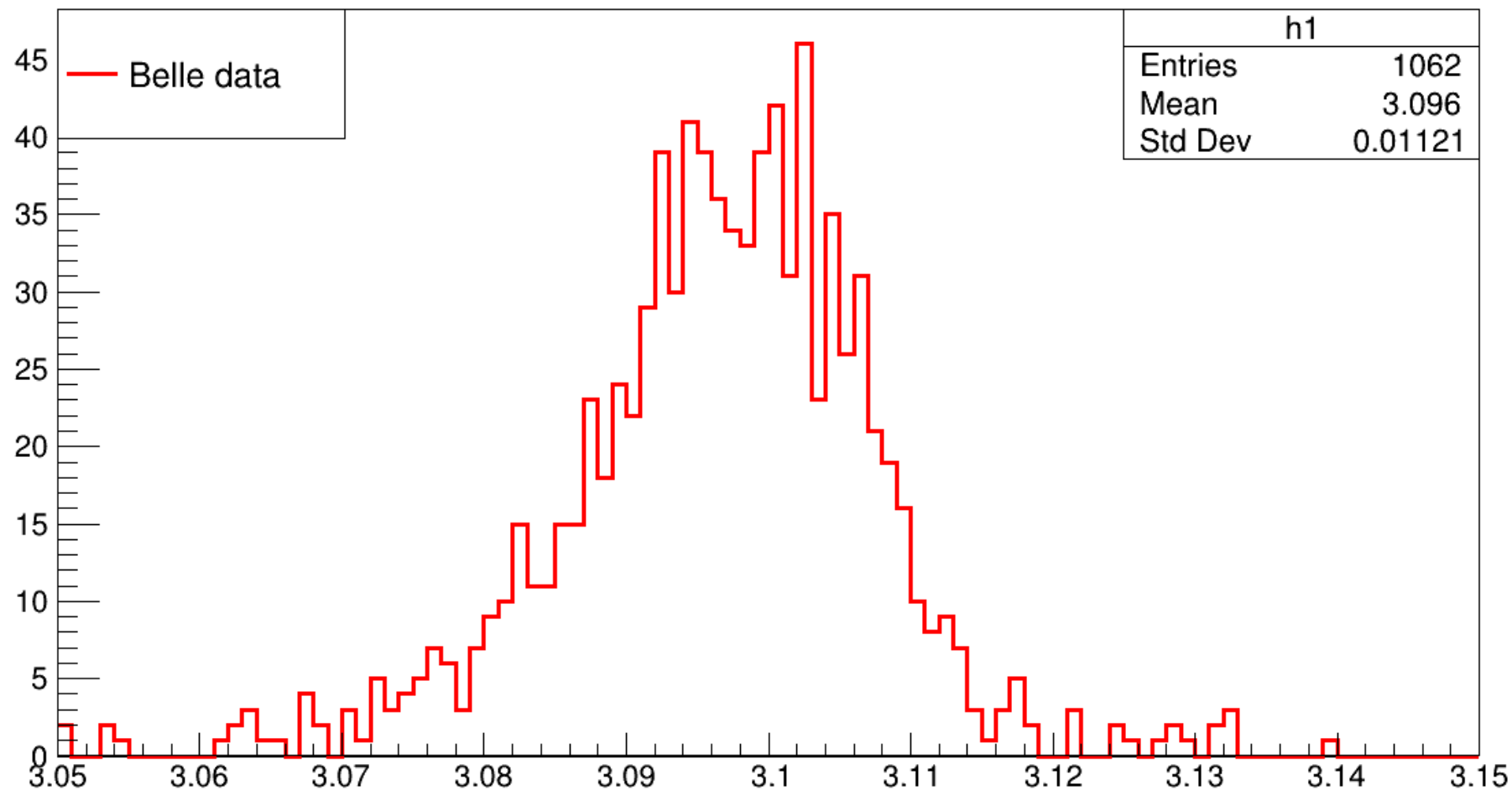
Mbc_Bsig with rank 1



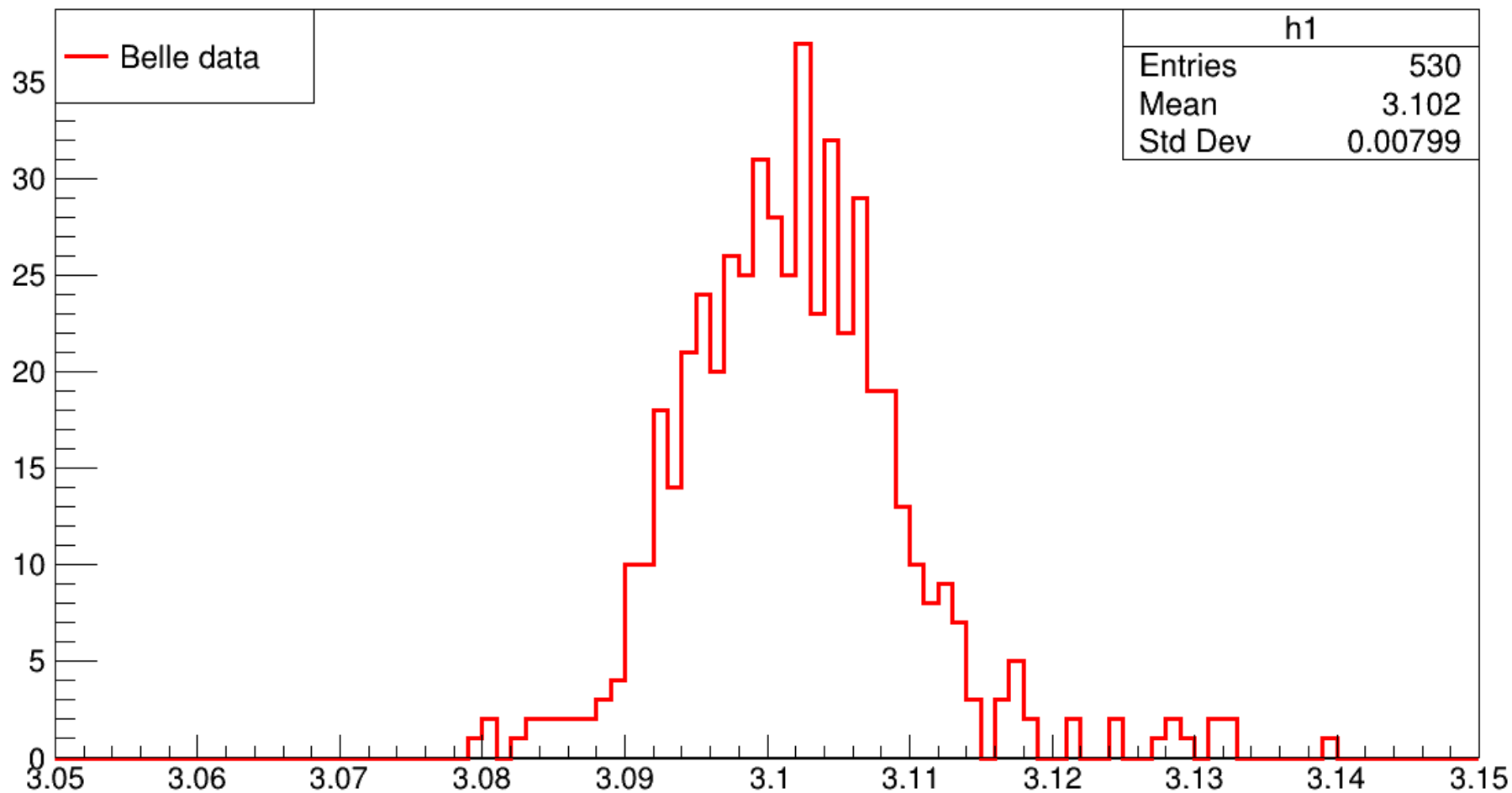
Mbc_Bsig with rank 1 and $|\sin\phi| < 1$



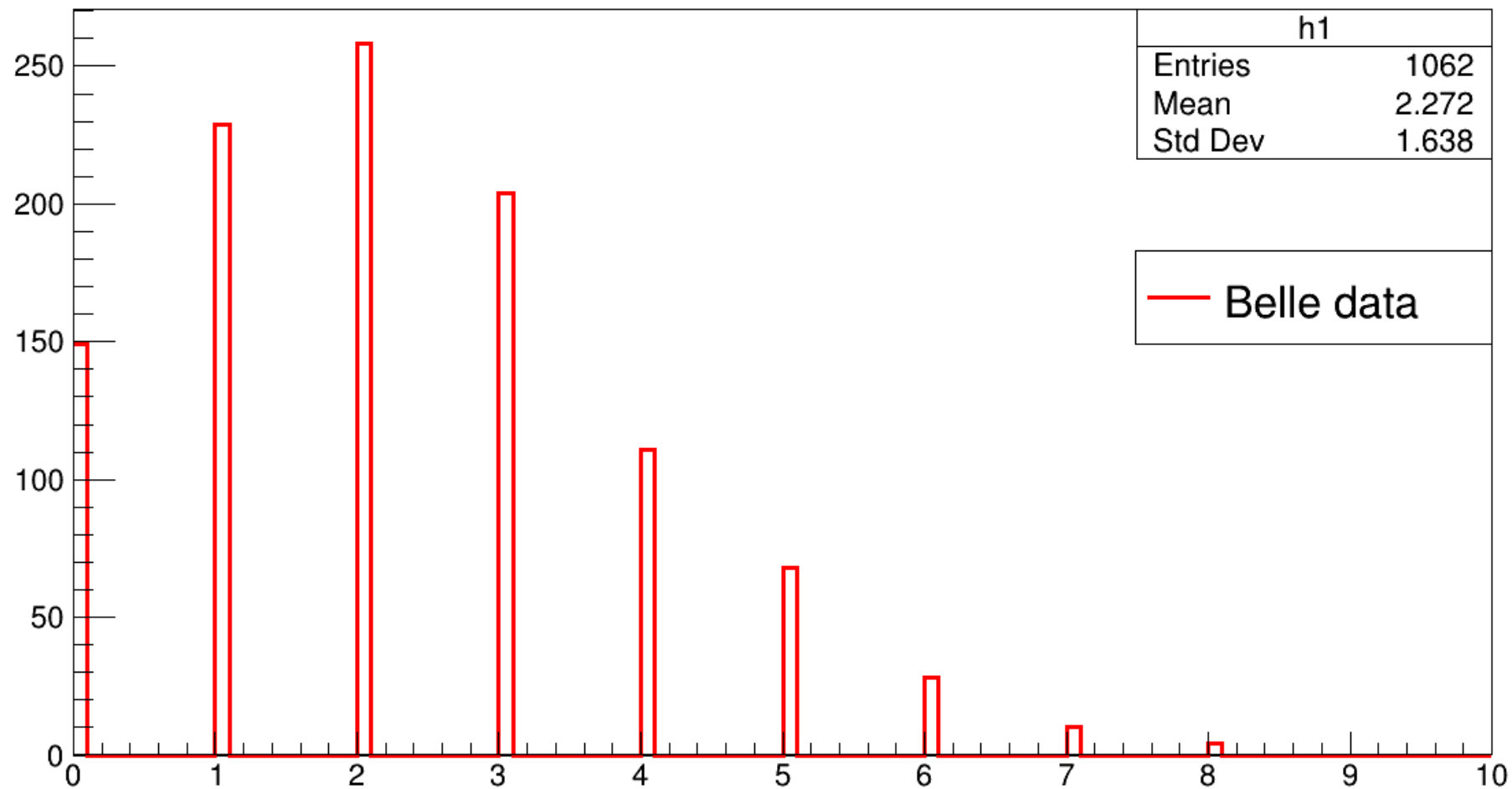
m_Jpsi with rank 1, $-0.15 < \Delta E_{Bsig} < 0.050$ and $Mbc_{Bsig} > 5.27$



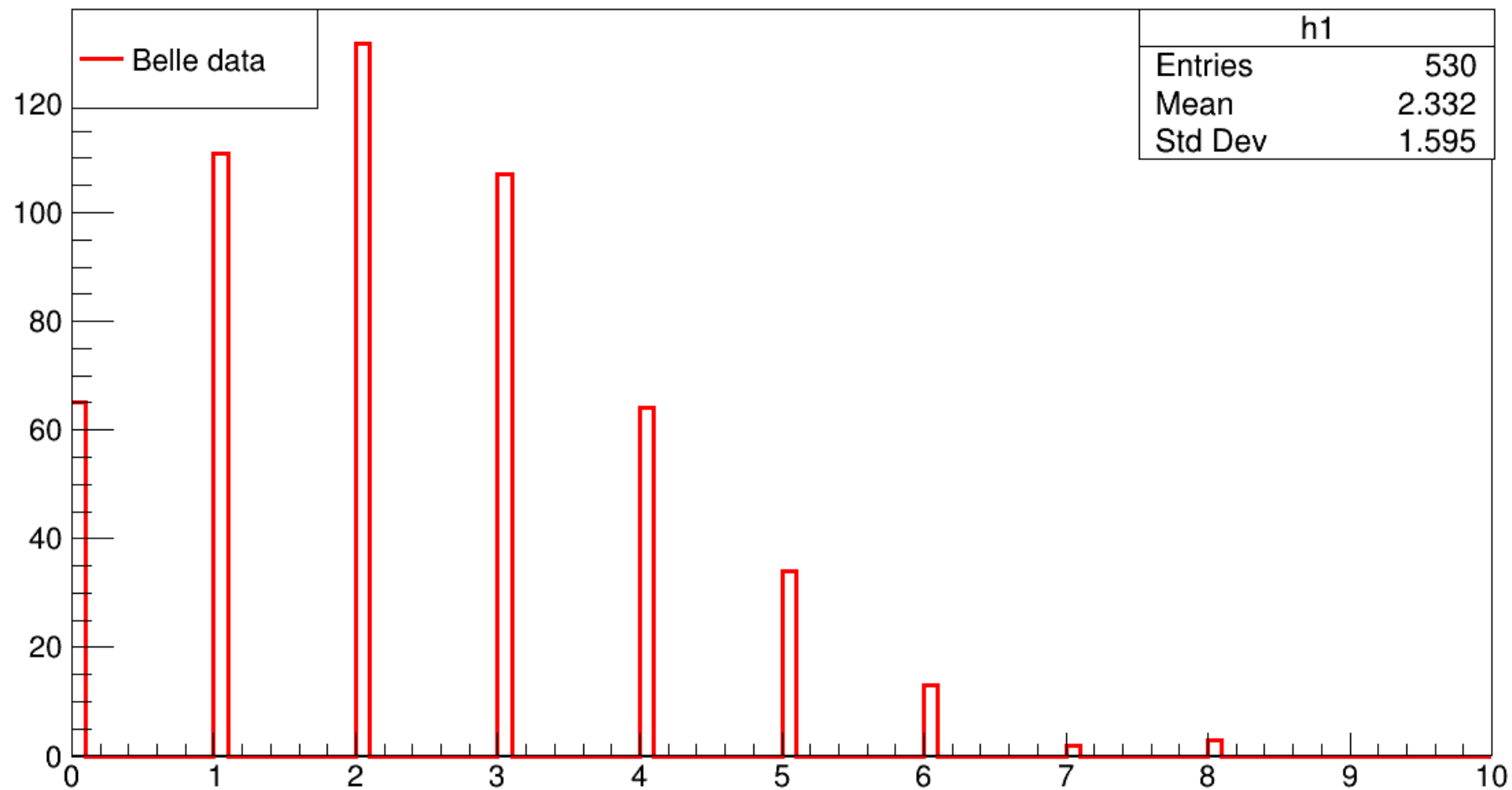
m_Jpsi with rank 1, $|\sin\phi| < 1$, $-0.15 < \Delta E_{Bsig} < 0.050$ and $M_{bc_Bsig} > 5.27$



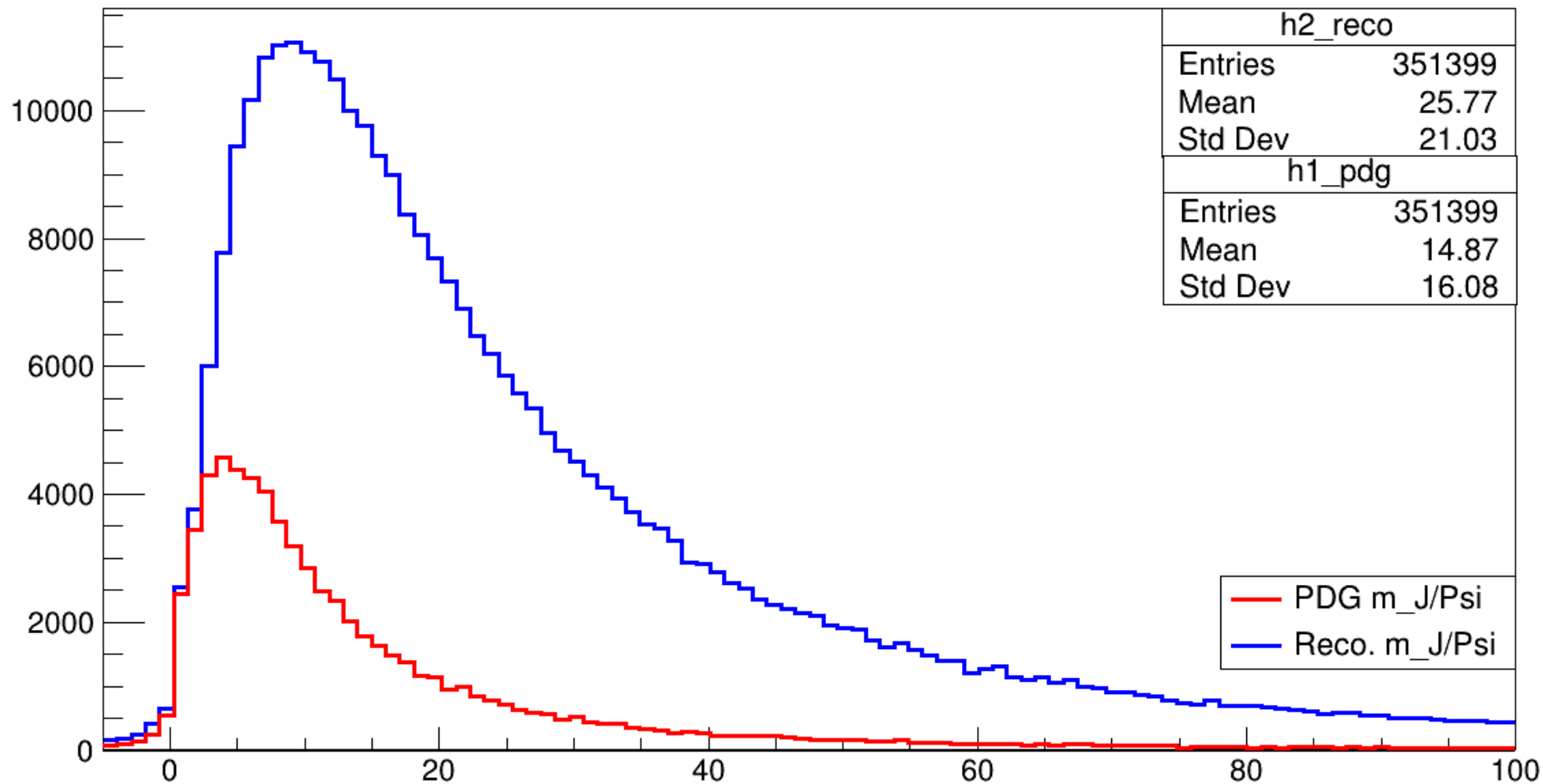
Number of photons with rank 1, $-0.15 < \Delta E_{\text{Bsig}} < 0.050$ and $M_{\text{bc}} > 5.27$



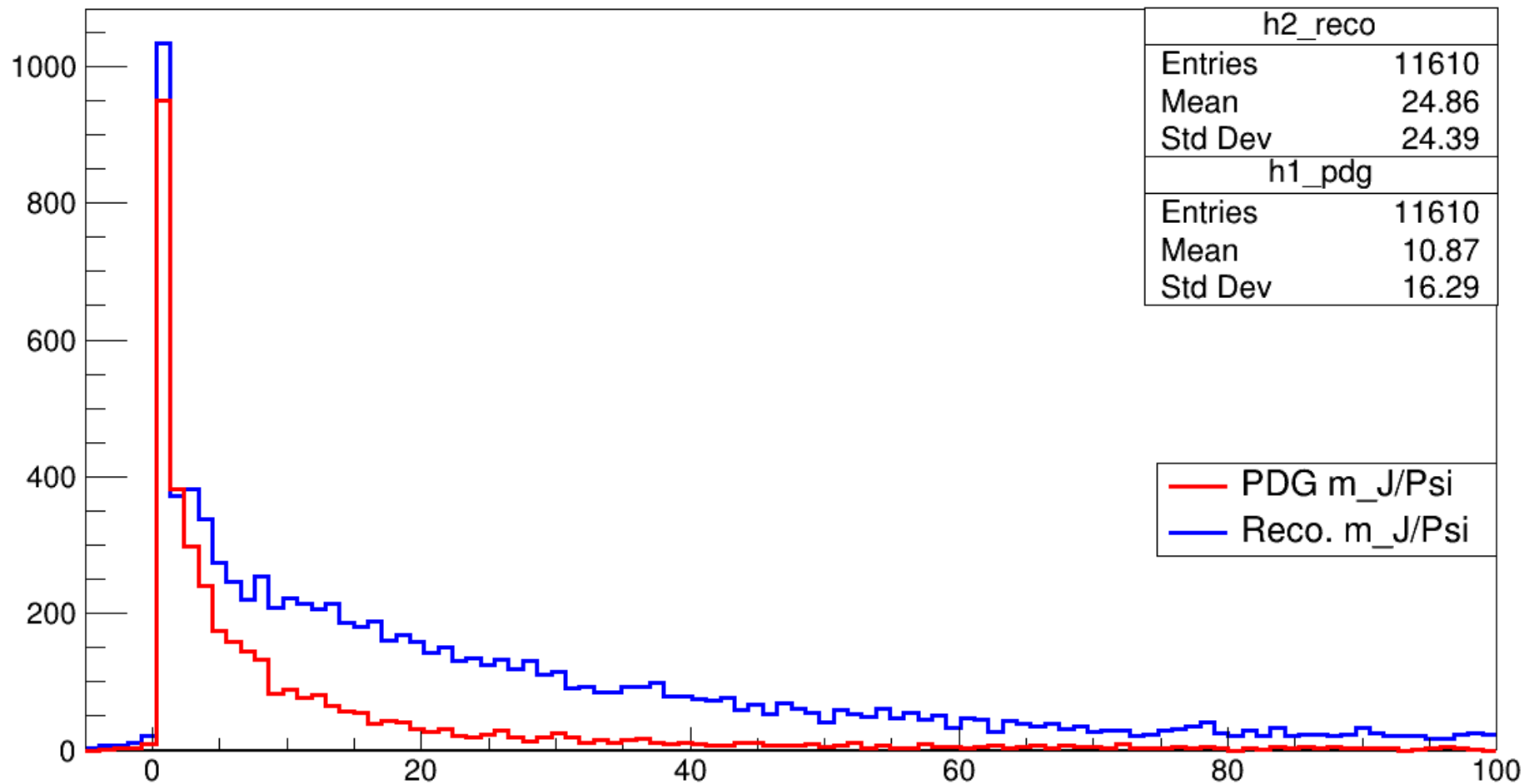
Number of photons with rank 1, $|\sin(\phi)| < 1$, $-0.15 < \Delta E_{\text{Bsig}} < 0.050$ and $M_{\text{bc_Bsig}} > 5.27$



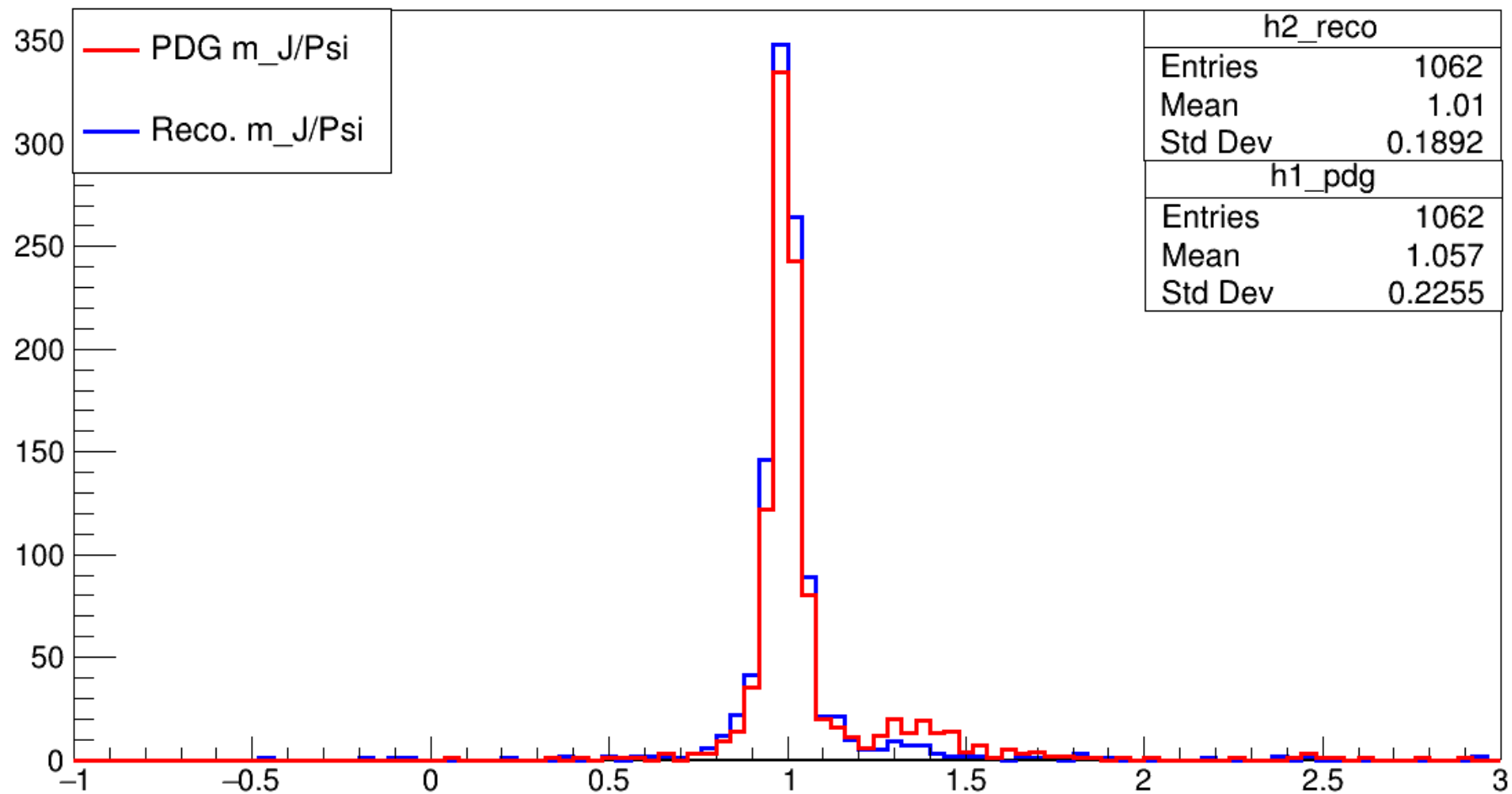
Sin_phi with rank 1



Sin_phi with rank 1 and Mbc_Bsig>5.27



Sin_phi with rank 1, $-0.15 < \Delta E_{Bsig} < 0.050$ and $M_{bc_Bsig} > 5.27$



Backup

Mbc_Bsig with rank 1 and $\text{abs}(\sin_\phi) < 1$

