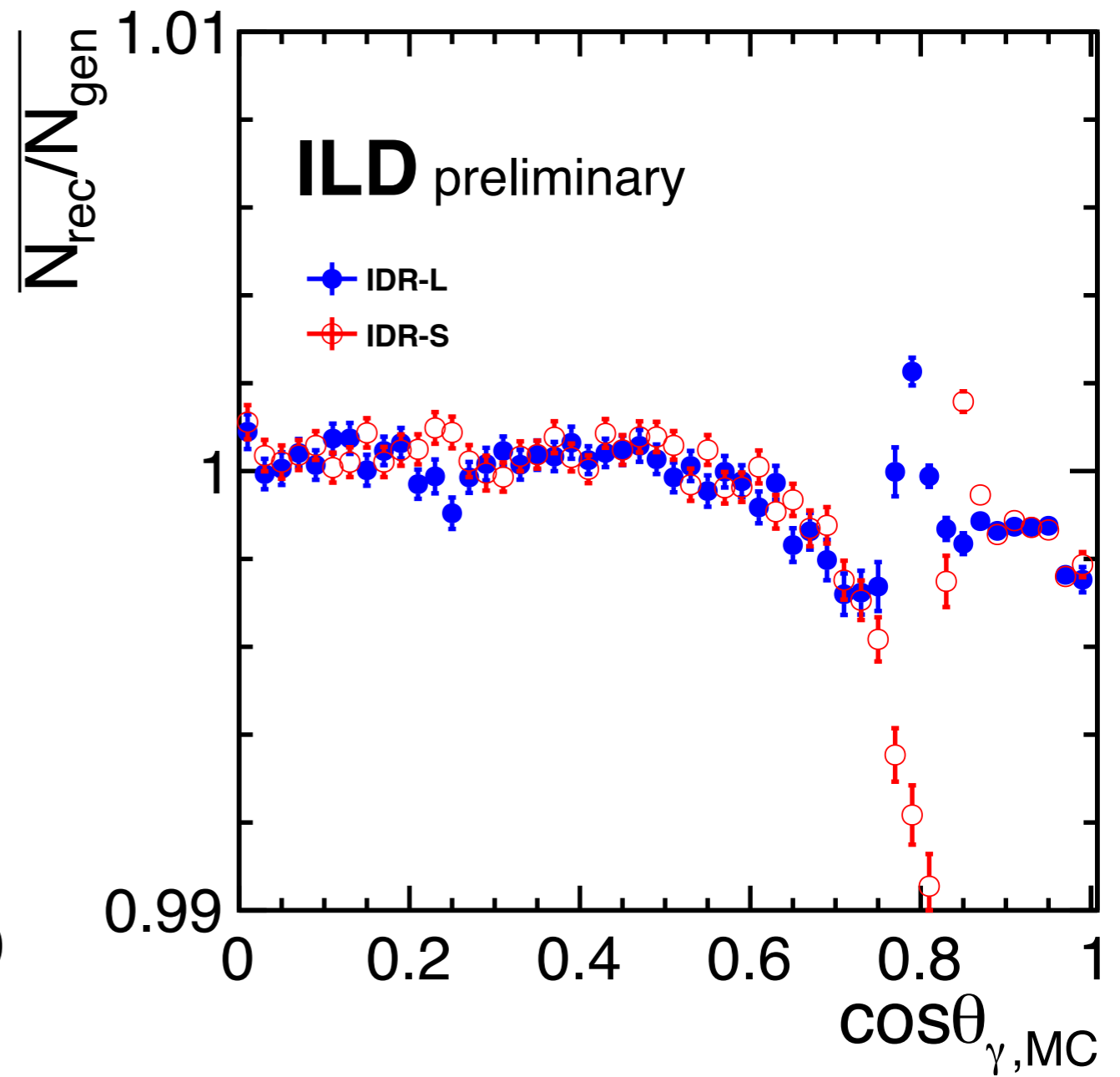
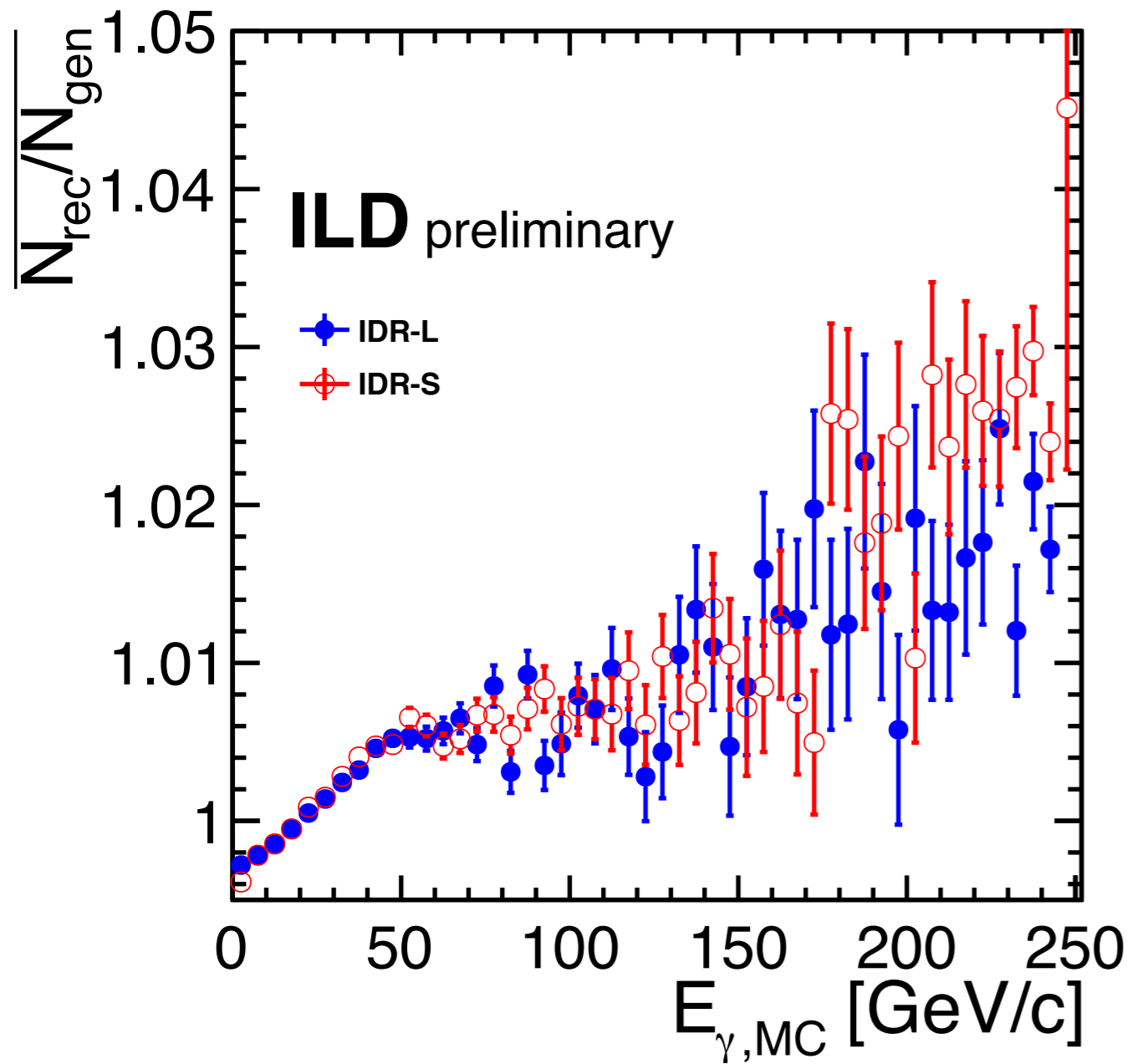


WIMP benchmark for IDR

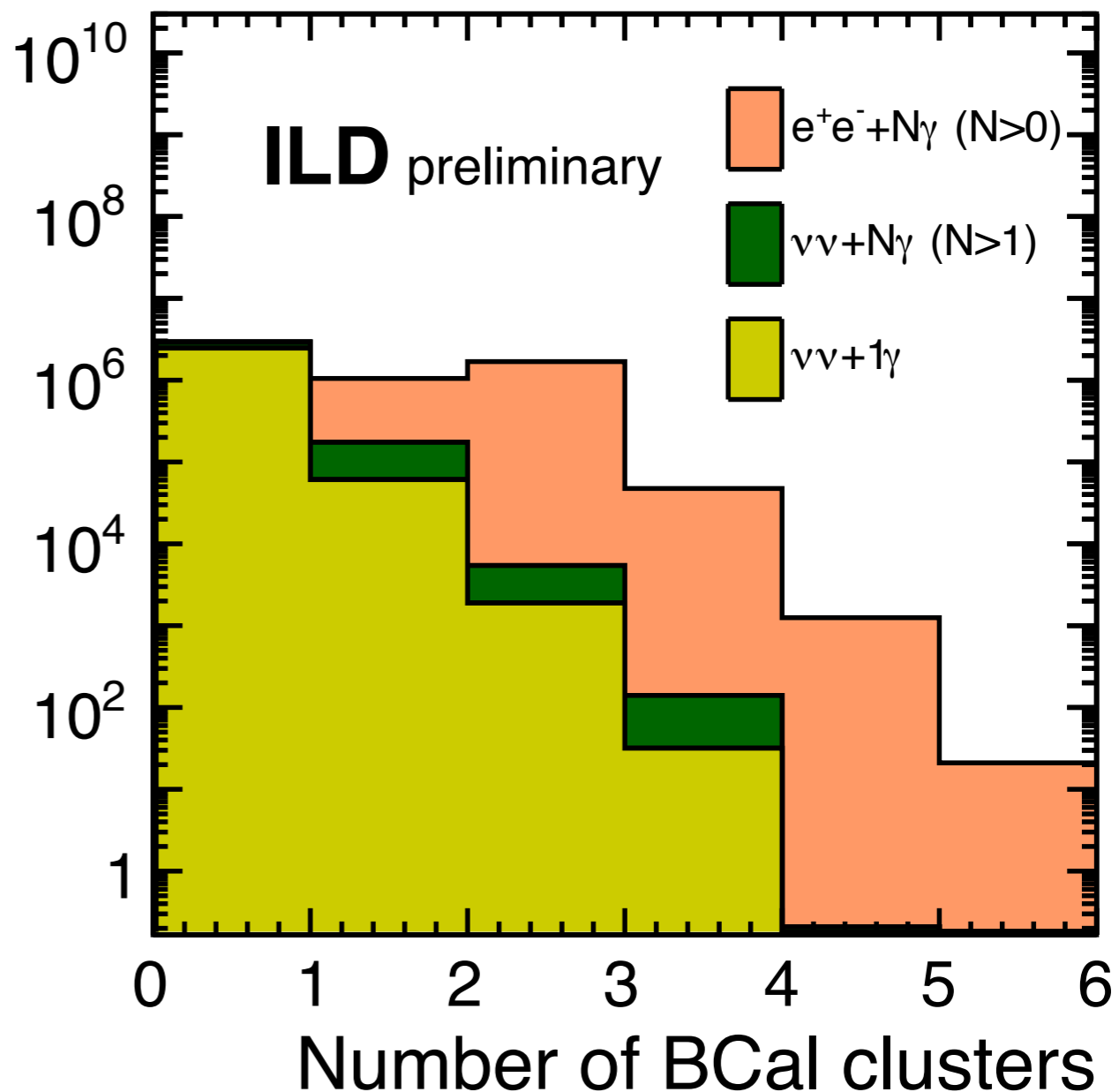
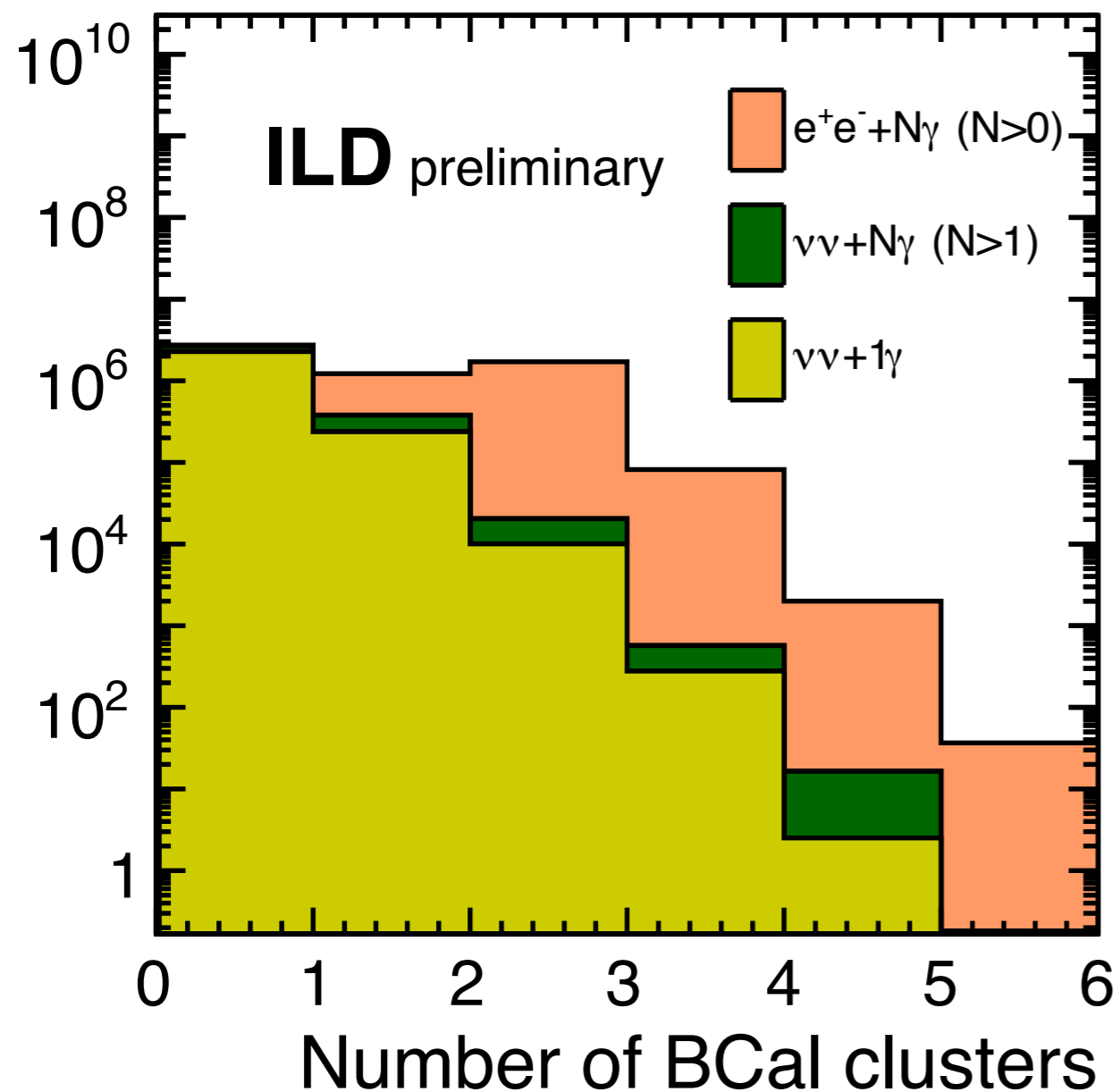
Ryo Yonamine
Tohoku University

IDR plot (I) : $N_{\text{rec}}/N_{\text{gen}}$



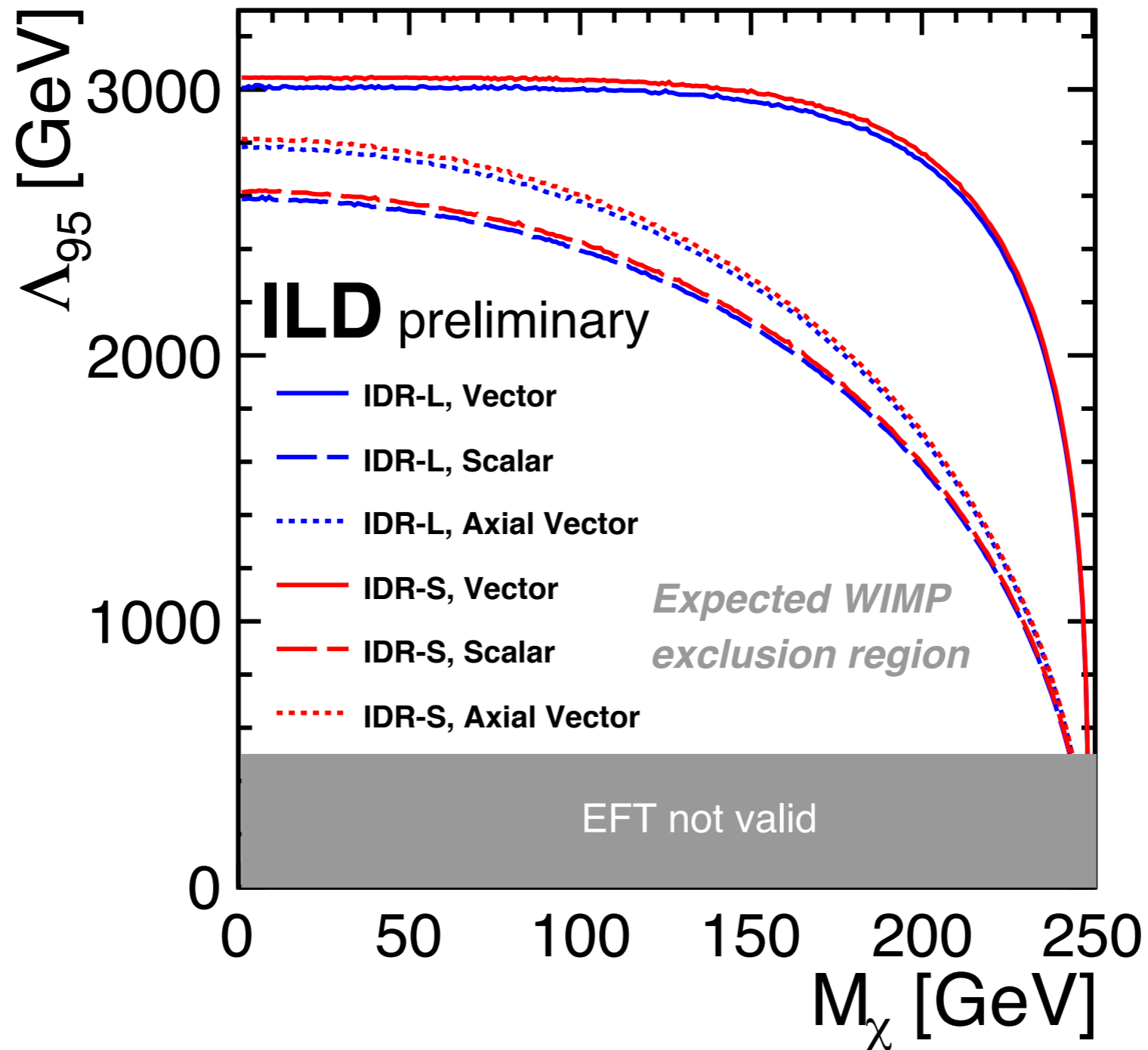
Photon reconstruction : The number of reconstructed photons per generated photon as a function of the signal photon energy.

IDR plot (2) : # of BCal hits



BCal vetoing : Comparison between IDR-L and IDR-S models on the number of BCal clusters. The histograms are stacked. ($500 \sim \text{fb}^{-1}$, no beam polarization).

IDR plot (3) : Exclusion limits

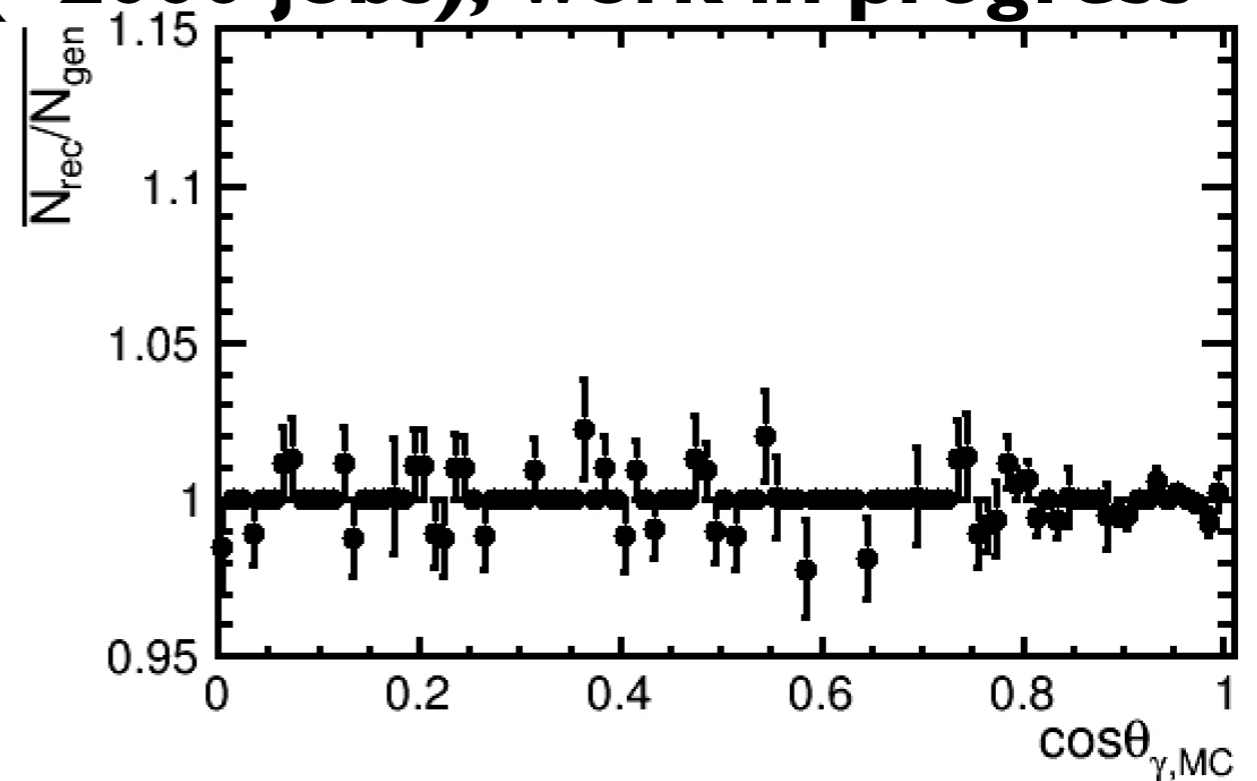
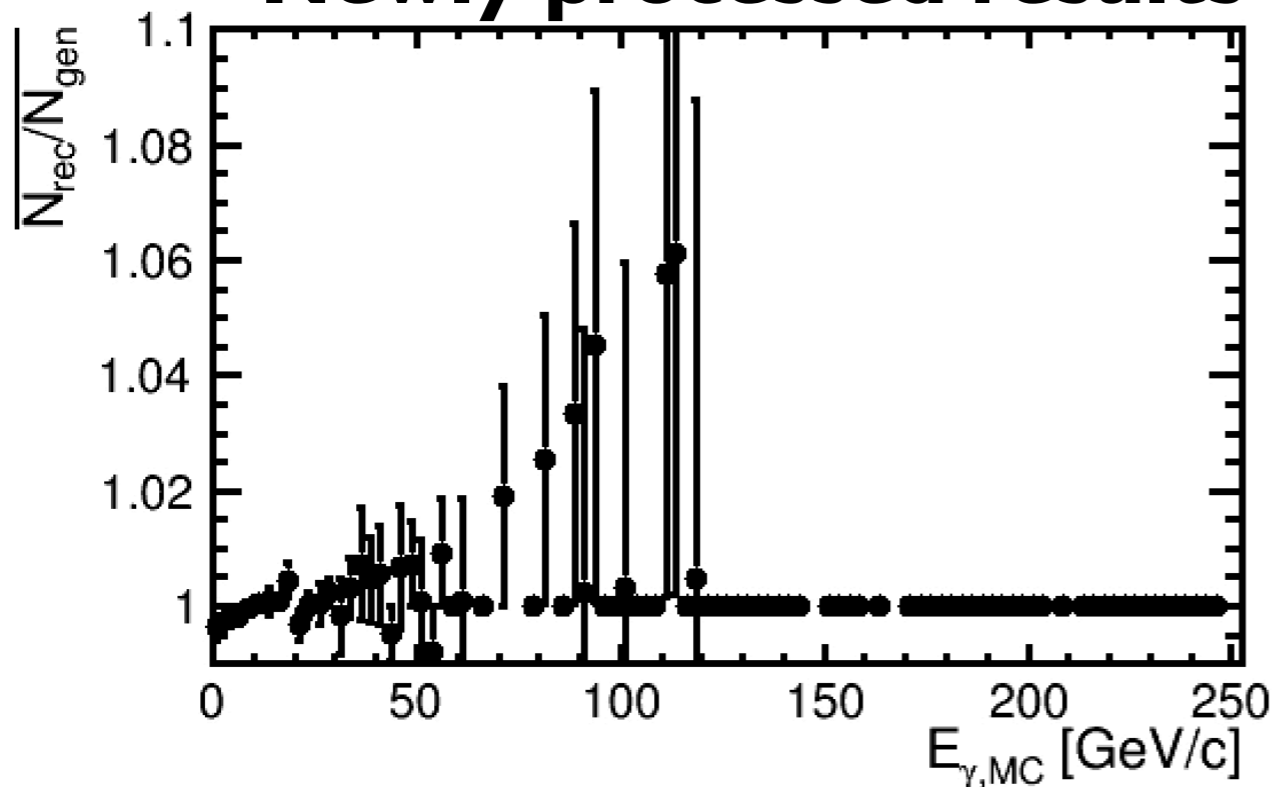


Sensitivity : 95% confidence level exclusion limits for different effective operators with a realistic sharing of the polarization at 4ab^{-1} of H20 scenario; (- -, - +, + -, + +) = (10%, 40%, 40%, 10%). $E_{\text{cm}} = 500 \text{ GeV}$.

Reprocessing BCal reconstruction for I5 sample

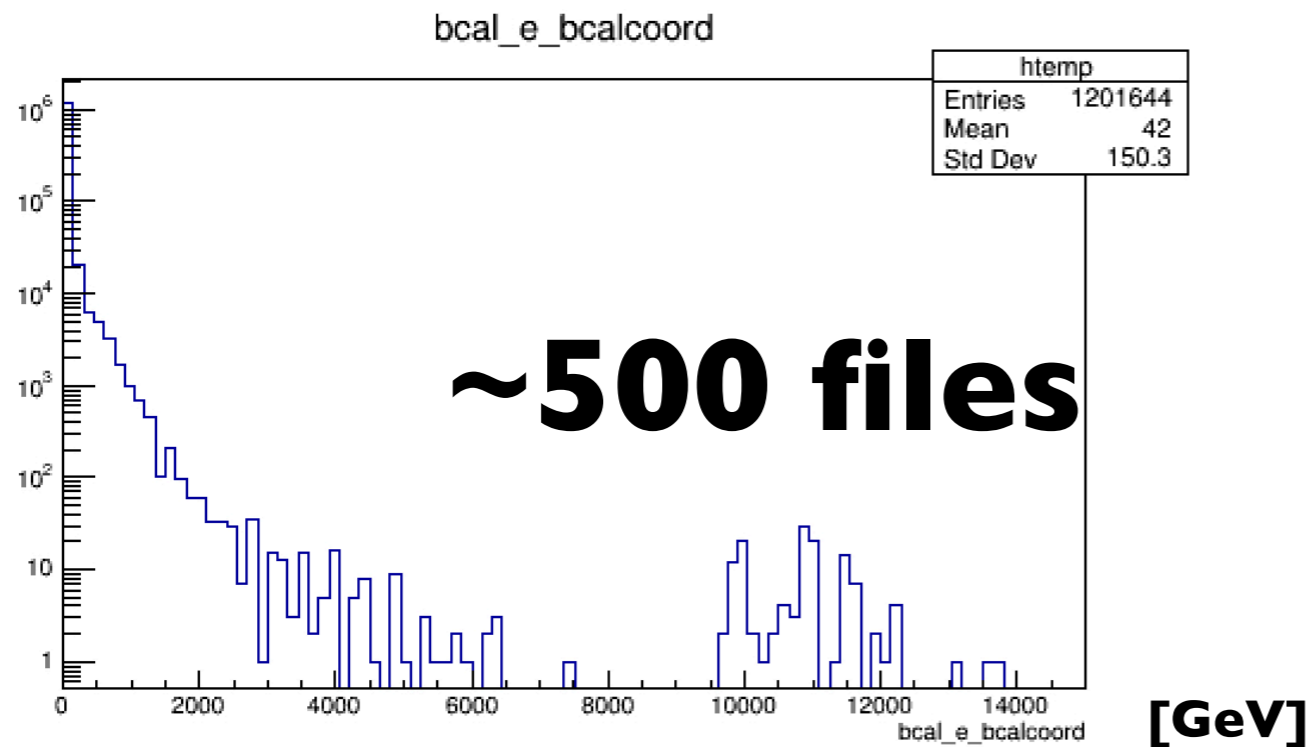
- ❖ **The central staging has been turned out to be necessary eventually.**
 - ▶ Otherwise, the job success rate become $\sim 50\%$.
 - ▶ Frank kindly is taking care of the staging process (partially done).
 - ▶ Currently vvNg samples are staged and BCal reco. is underway. (success rate $>99\%$ at first submission and 100% after rescheduling)
 - ▶ Rough time estimation $\sim 4\text{k}$ jobs per day (after staging).
Total # of jobs $\sim 80\text{k}$ jobs $\implies \sim 20$ days

Newly processed results (~ 2000 jobs), work in progress

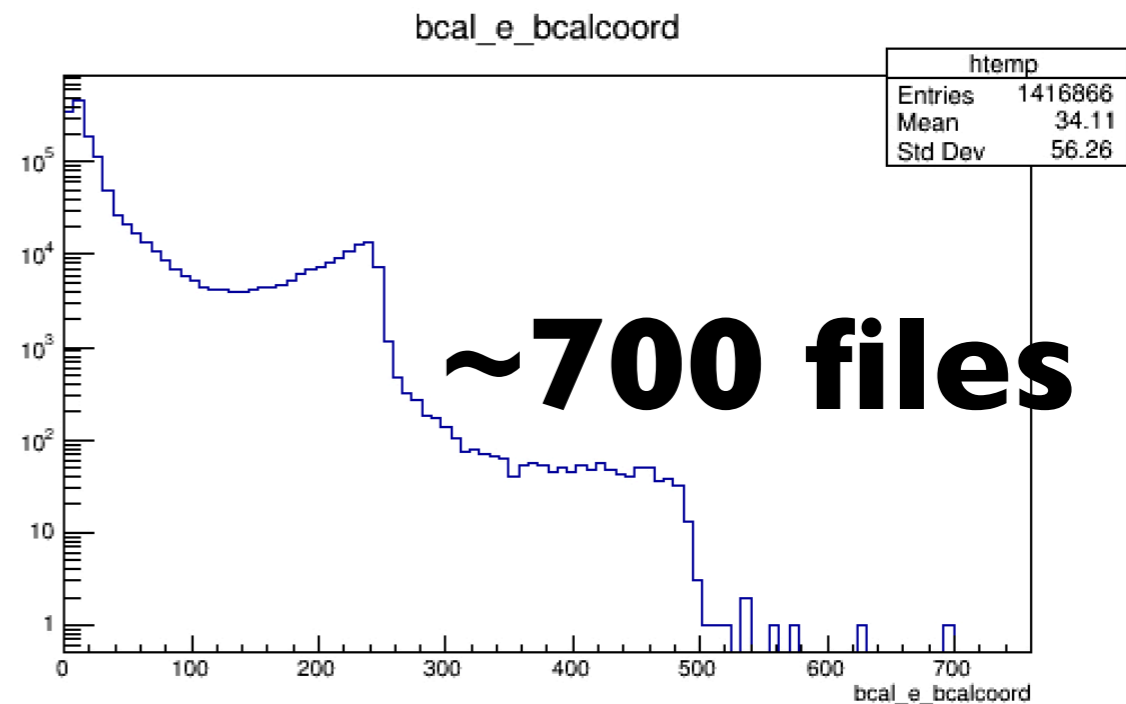


BCal energy

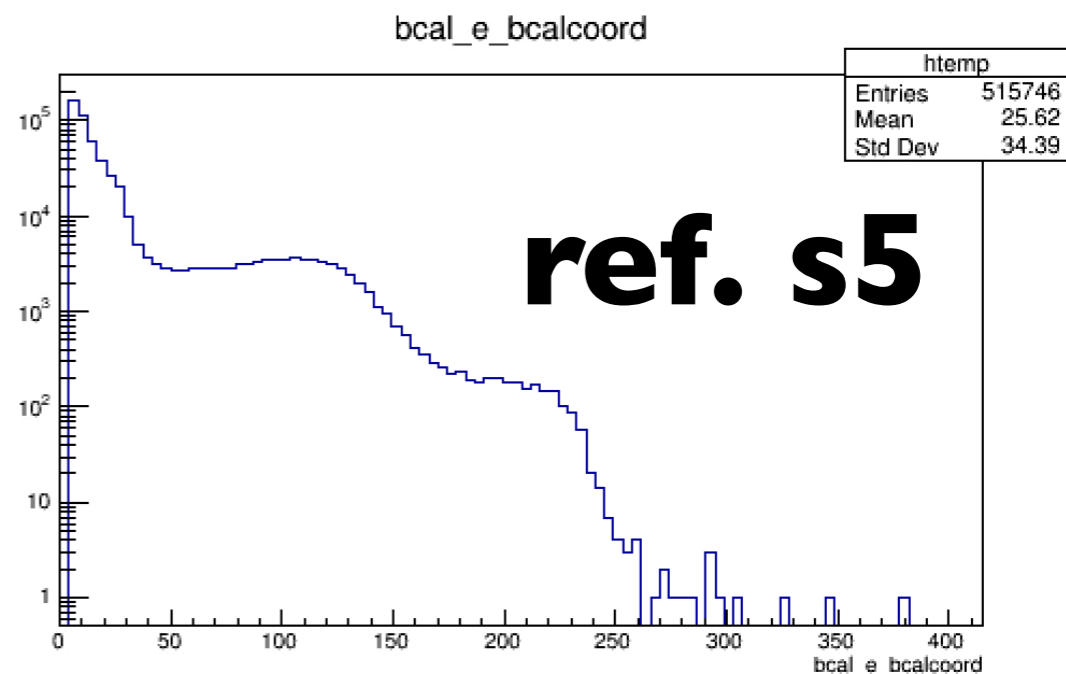
Work in progress



w/o new bkg map



w/ new bkg map



Summary

- ❖ **Tentative plots have been prepared.**
 - ▶ 15 plots will be replaced after BCal reprocessing (in ~20days?).
- ❖ **Need closer look to BCal energy distribution.**
 - ▶ looks different between I5 and s5.