

# Status Report

Tokyo Institute of Technology



Masahiro Tanaka

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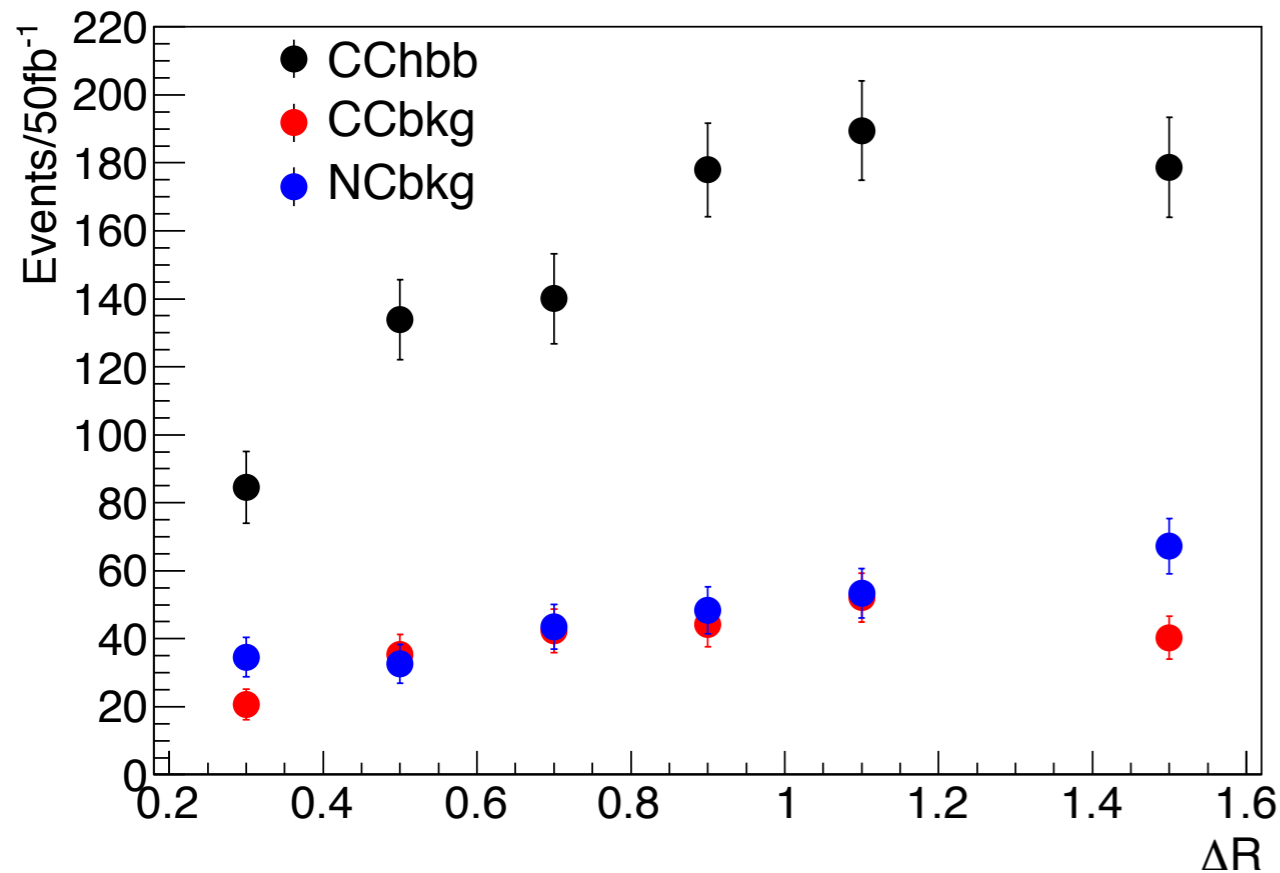
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- Comparison of  $\Delta R$  for kT algorithm
- Change of generator cut for NCbkg

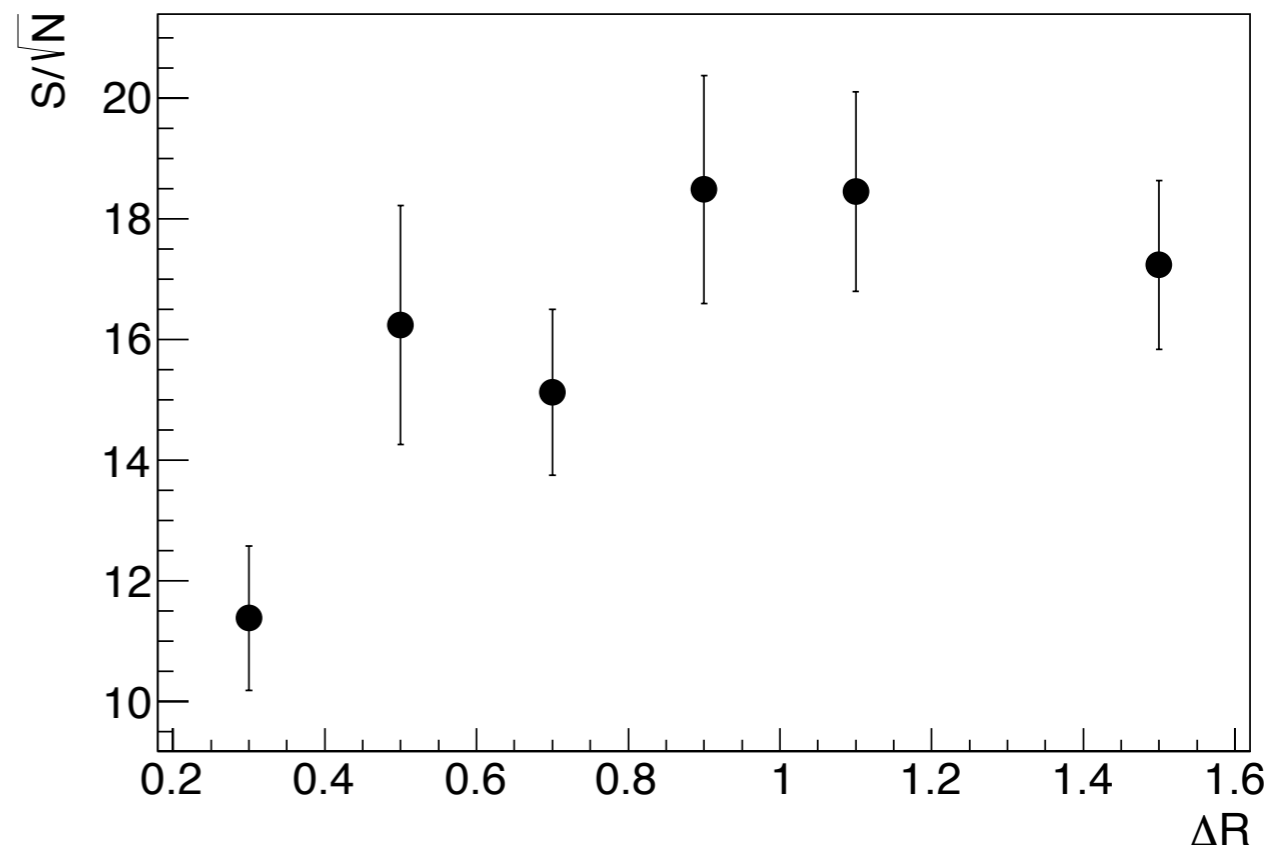
# Comparison of $\Delta R$

- Comparison of  $\Delta R$  for kT algorithm
  - Comparison of Event Numbers for CChbb, CCbkg and NCbkg in signal region
  - Comparison of  $S/\sqrt{N}$

Number of Events



$S/\sqrt{N}$



# Change of generator cut

- Change of generator cut for **NCbkg**
  - ▶ For parton, lepton and photon,  $|\text{Eta}| < 5$ , **same**
  - ▶ For parton,  $P_T > 10$  GeV, **same**
  - ▶ **For lepton,  $P_T > 1$  GeV  $\rightarrow$   $P_T > 0.5$  GeV**
  - ▶ More than one  $M_{jj} > 60$  GeV parton pair, **same**

Table of samples

	$\sigma$ (pb)	Number of samples	$\frac{N}{\sigma}$ ( $\text{fb}^{-1}$ )
Default NCbkg	83	4.2M	50.6
Changed NCbkg	97.7	5.25M	53.7

~Result~

Number of Events in signal region

**Default**

**$48 \pm 6.9$**

**Changed**

**$64 \pm 7.7$**