

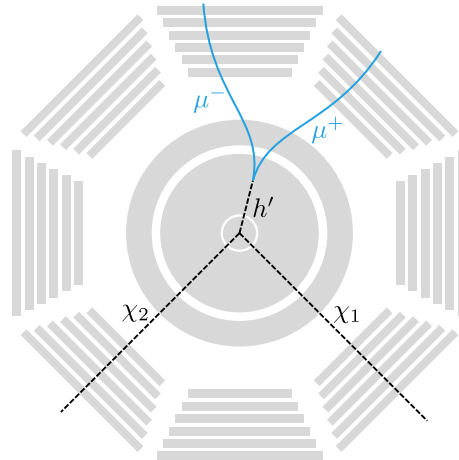
# Current Track Trigger Efficiencies

Belle II ML-based Trigger Meeting

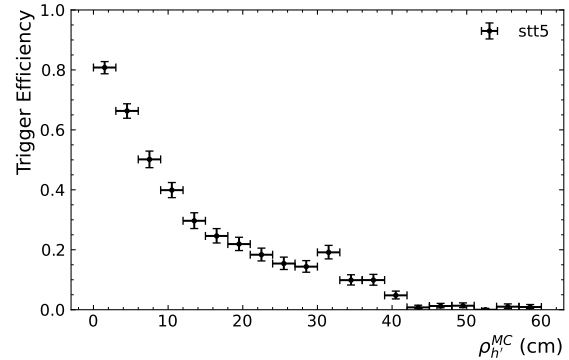
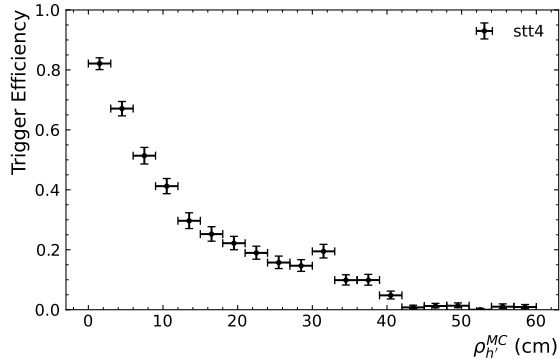
Patrick Ecker | 12.05.2021



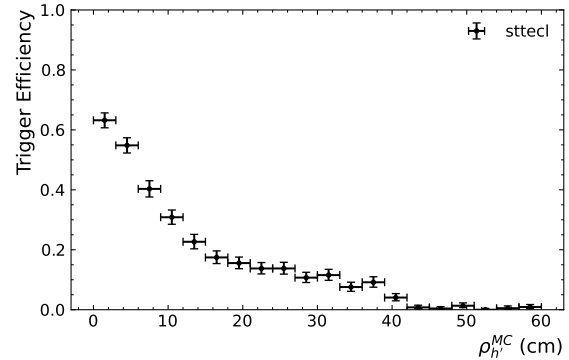
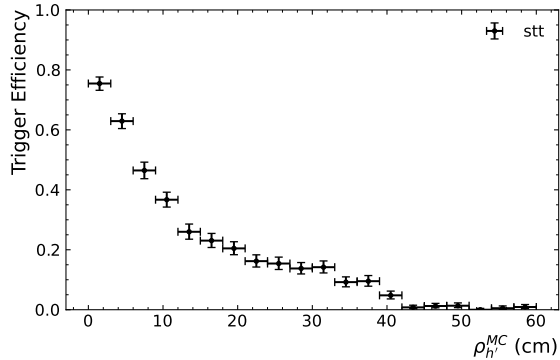
# What are we looking at?



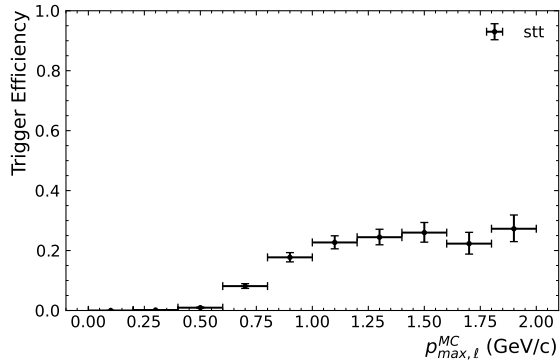
# Displacement dependence of STTs



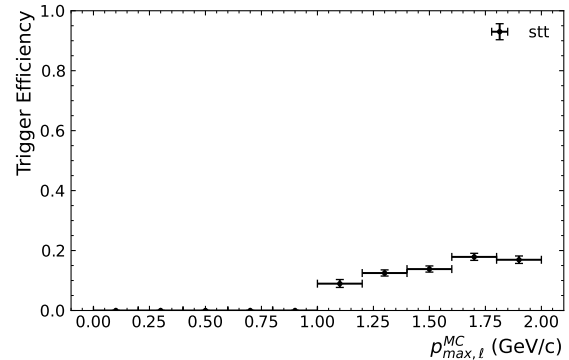
# Displacement dependence of STTs



# Momentum dependence of STTs

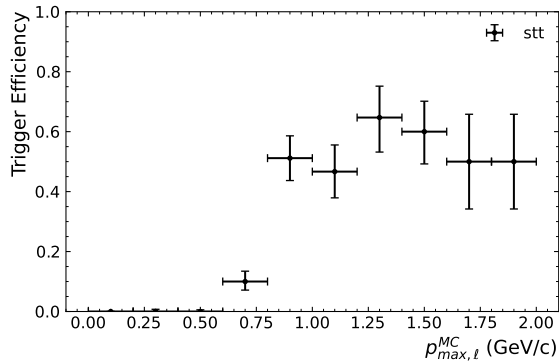


$$m_{h'} = 0.5 \text{ GeV}$$

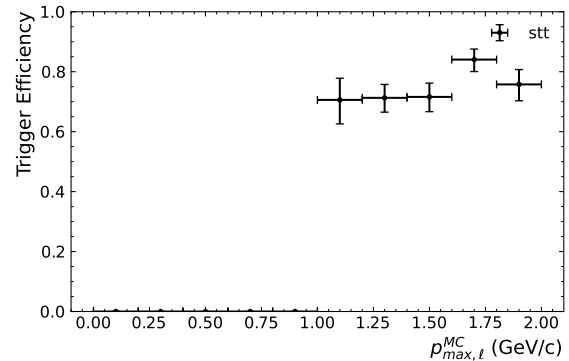


$$m_{h'} = 2.0 \text{ GeV}$$

# Momentum dependence of STTs



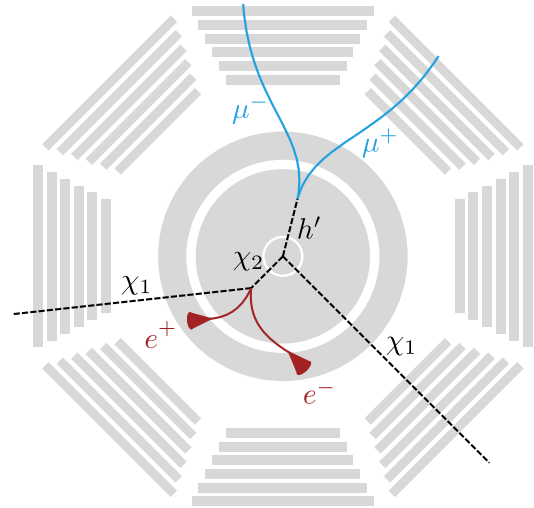
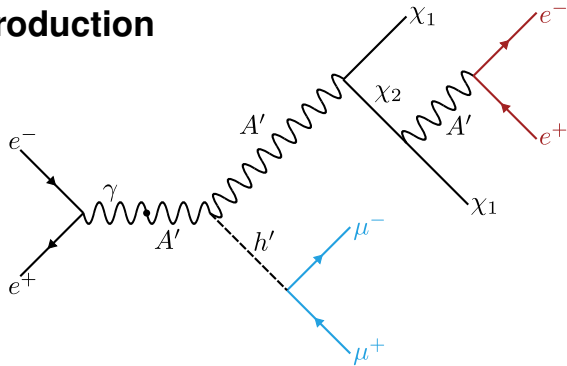
$$m_{h'} = 0.5 \text{ GeV}, \rho < 5 \text{ cm}$$



$$m_{h'} = 2.0 \text{ GeV}, \rho < 5 \text{ cm}$$

# BACKUP

# Introduction



## The Model

- 3 new DS particles:  $\chi_1$ ,  $\chi_2$ ,  $h'$
- 7 free model parameters
- up to two displaced vertices