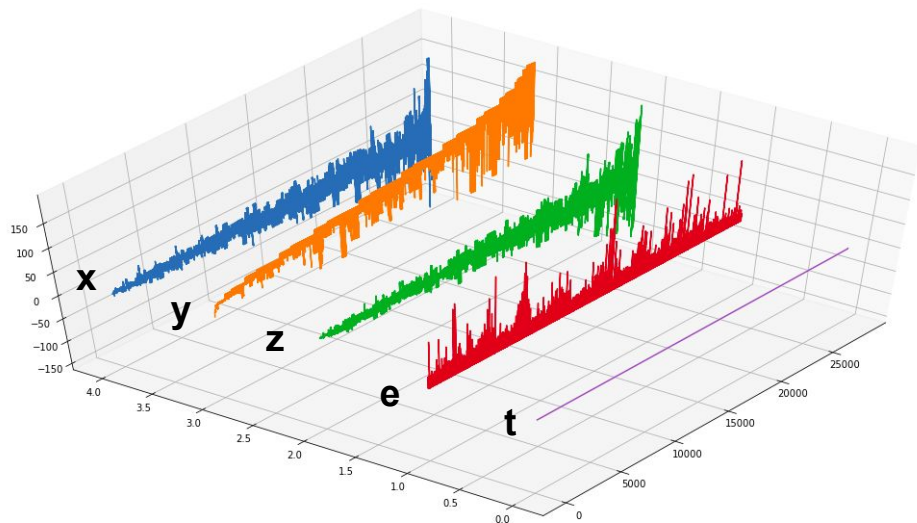


# Shower Projections Update

# Method

- Consider the shower as a sequence of  $(x, y, z)$  coordinates and the hit energy of the all mc interactions, sorted with respect to the hit time.
- Train 1D convolutional GAN\*

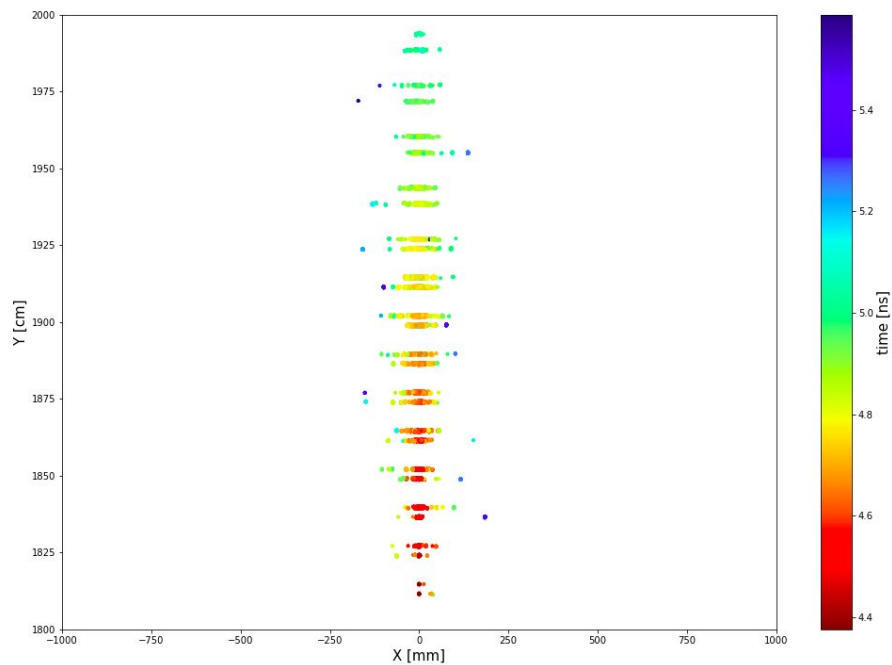


1D conv filter

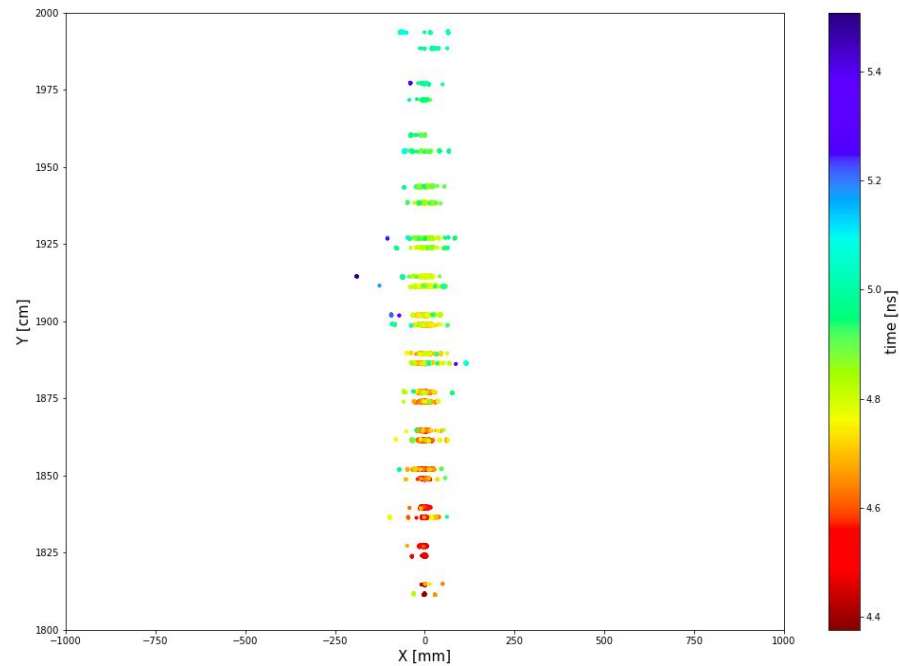


\*and hope that 1D conv will catch dependency between  $(x,y,z)$  and energy

# Shower Examples



90 GeV



50 GeV