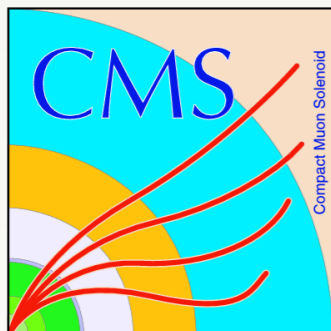# Learning to predict cumulative quantities in unordered sets
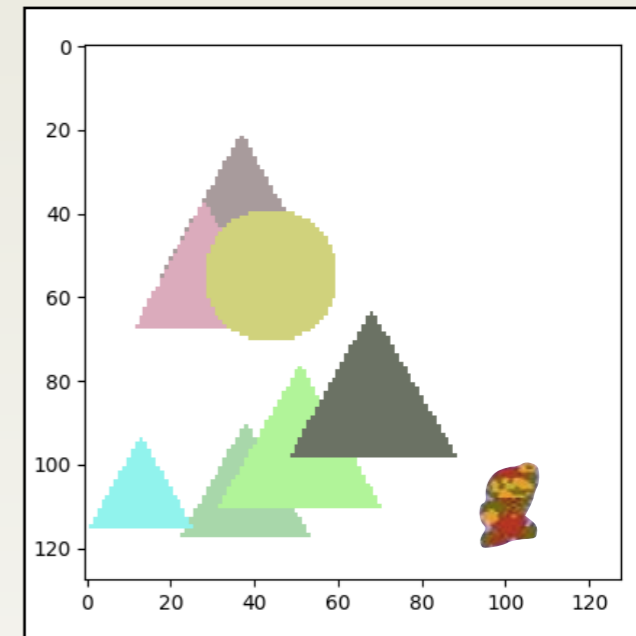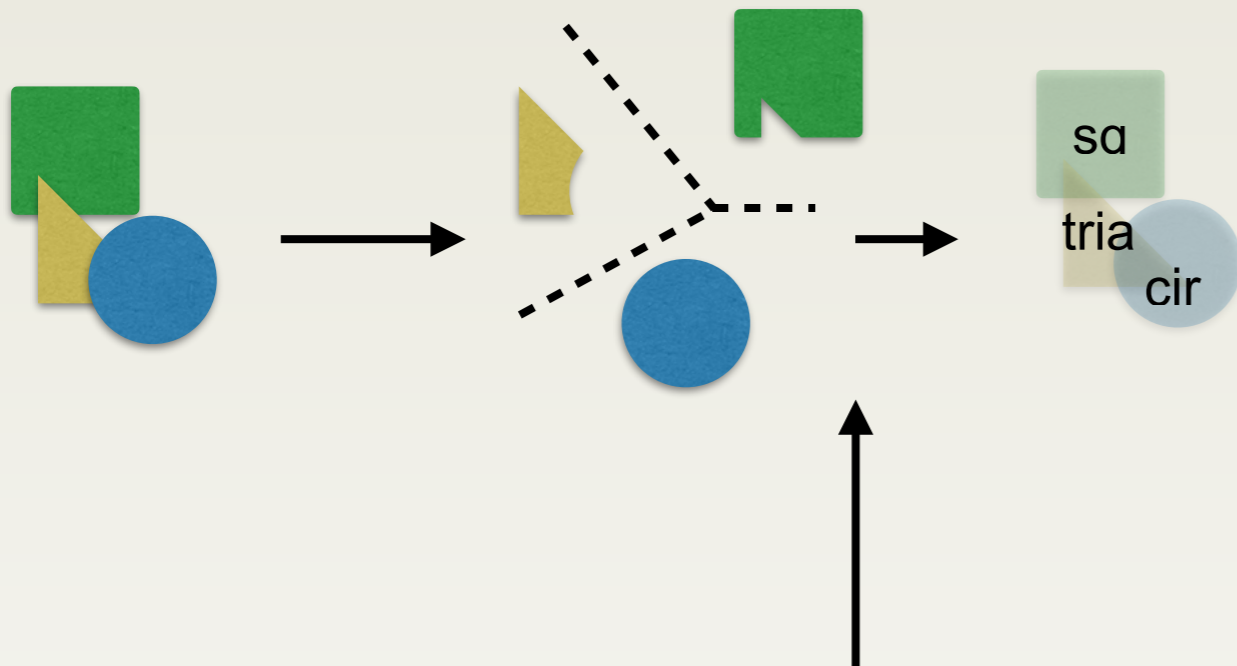
- or -
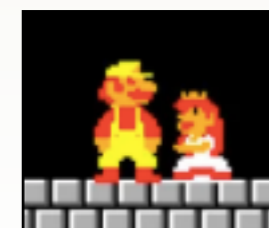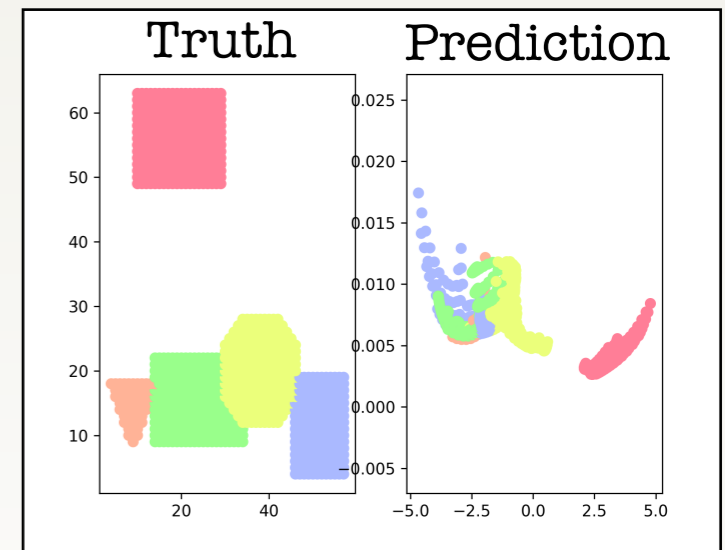## Predict N particles from M detector hits

Jan Kieseler

3.10.2019

- General idea: separate in latent space and assign ID/ energy ...
- Work done:
  - ✓ Get toy generator running and produce dataset
  - ✓ Write loss in tensorflow
  - ✓ Started first trainings
  - ✓? Discover that an $N_{pixel} * N_{pixel}$ distance needs a lot of memory
  - ✓ Wrote visualisation for output (during trainings)
  - ✓ Get ~~good reasonable promising ok~~ a lot to improve results

  (to my defense, just started the trainings, and got a lot of parameters to adjust)

Not quite there yet