Attività muoni

- Cluster position reconstruction and pattern recognition for ATLAS

  - Pattern recognition in the NSW for the HLT

  - Training sample on muons (MC) + background (2023 data)

  - RNN pattern recognition

  - Integrated in the L2 alg in a dedicated branch to be tested asap (work in collaboration with Junpei et al.)

- Same thing on a standalone MC that we developed as a testbed, with flexible layout and background levels

  - DNN (same as the NSW one) inference on GPU , FPGA

    - Tested up to now U50, U250, Versal tests ongoing, using the CERN testbed

    - Precision and timing studies

  - CNN for pattern recognition, not ideal but we can run FPGA inference

  - In touch with Xilinx to test RNN and in general for

  - Paper to be submitted

- Using the CERN ATLAS TDAQ testbed for training and inference, and the Rome GPU server for training and production of simulated samples