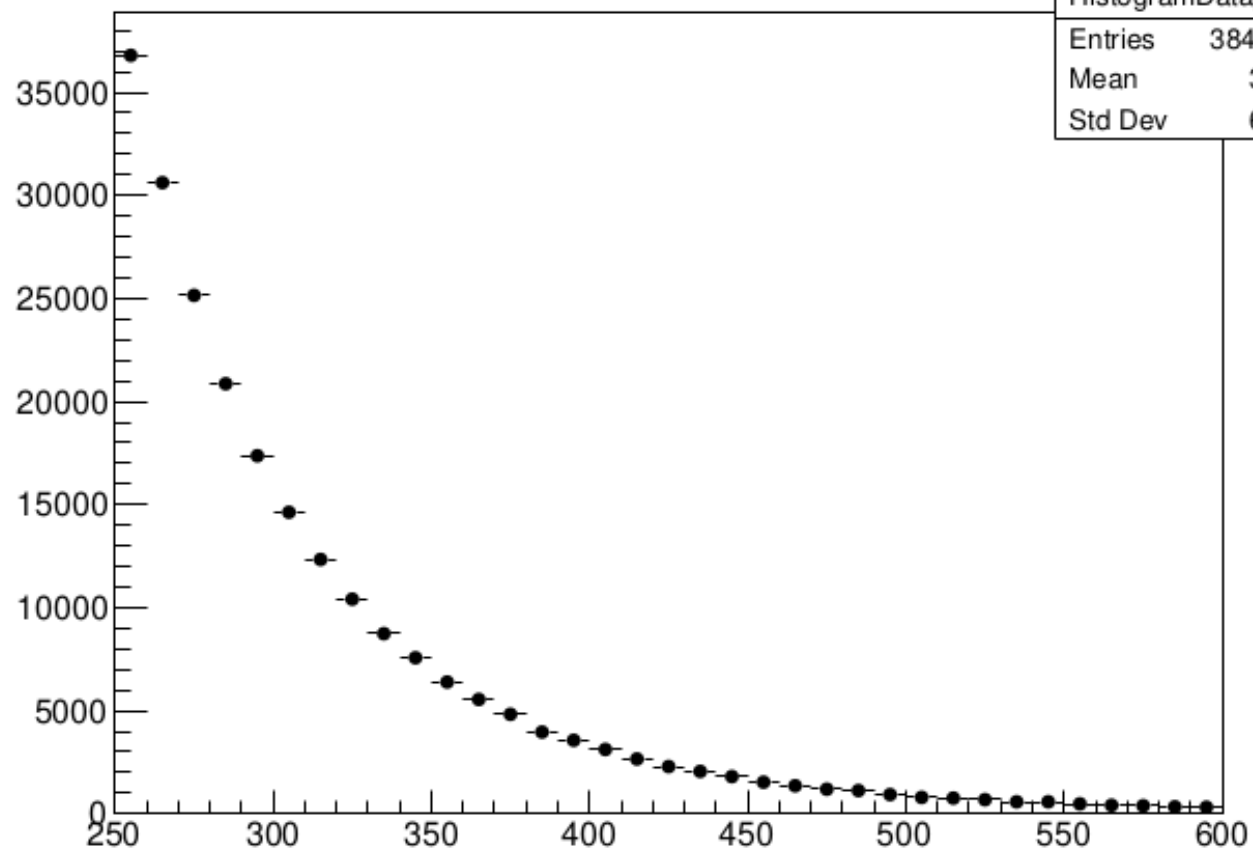


Comparison of Machine Learning algorithms applied to the search for rare processes in the LHC CMS data

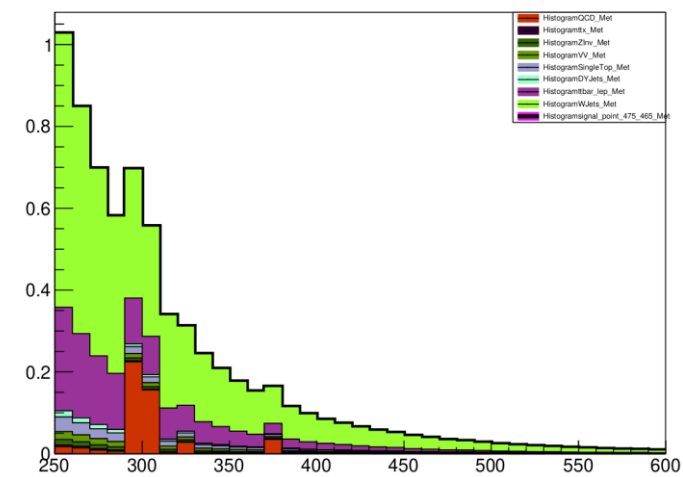
By: Duarte Lopes and Tiago Rebelo



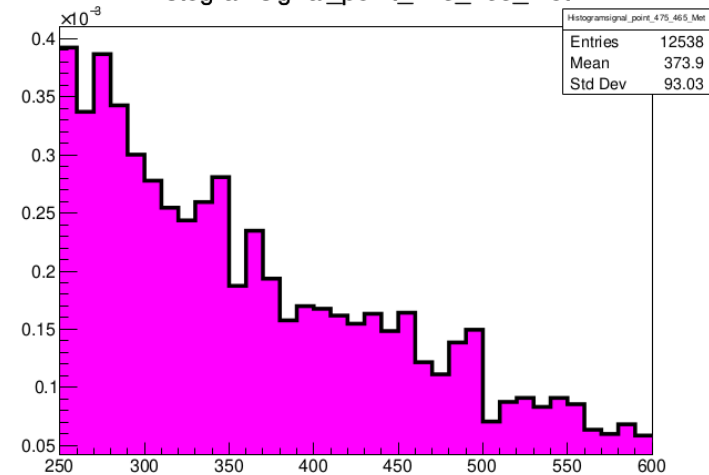
HistogramData_Met



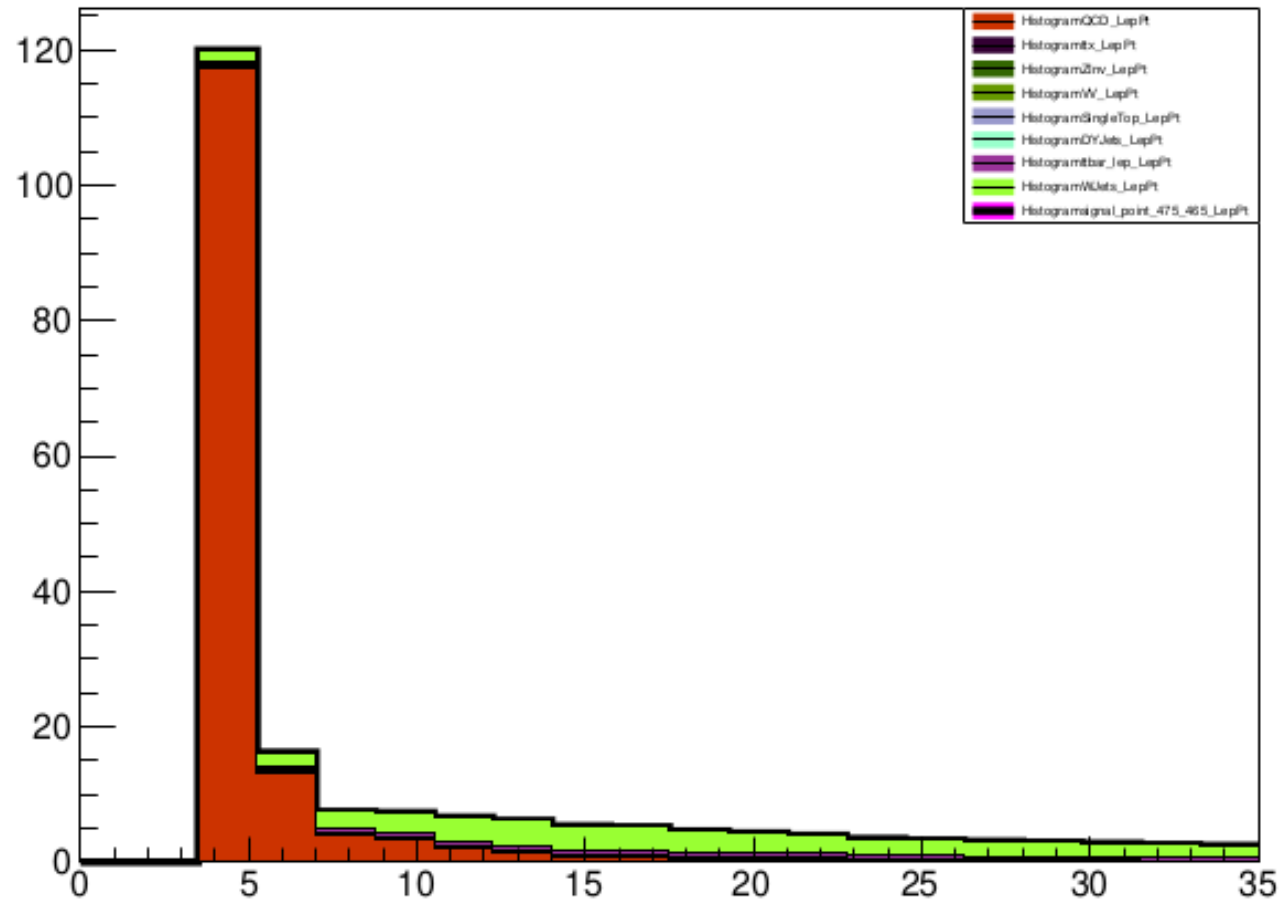
Met



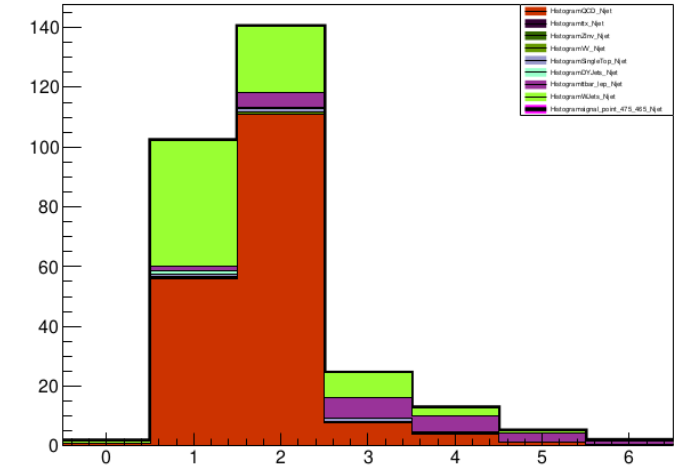
Histogramsignal_point_475_465_Met



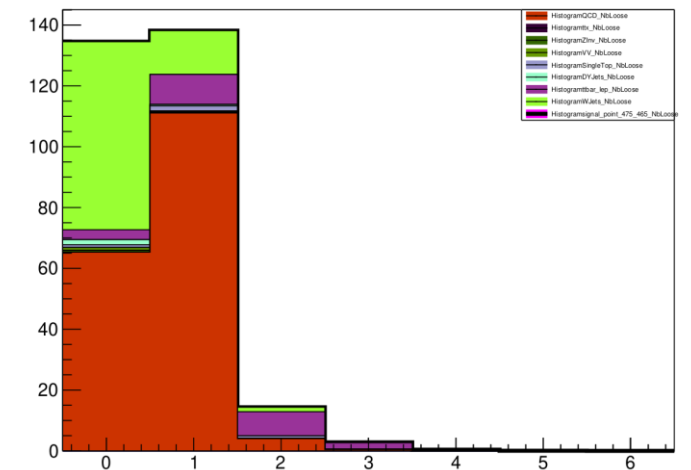
LepPt



Njet



NbLoose

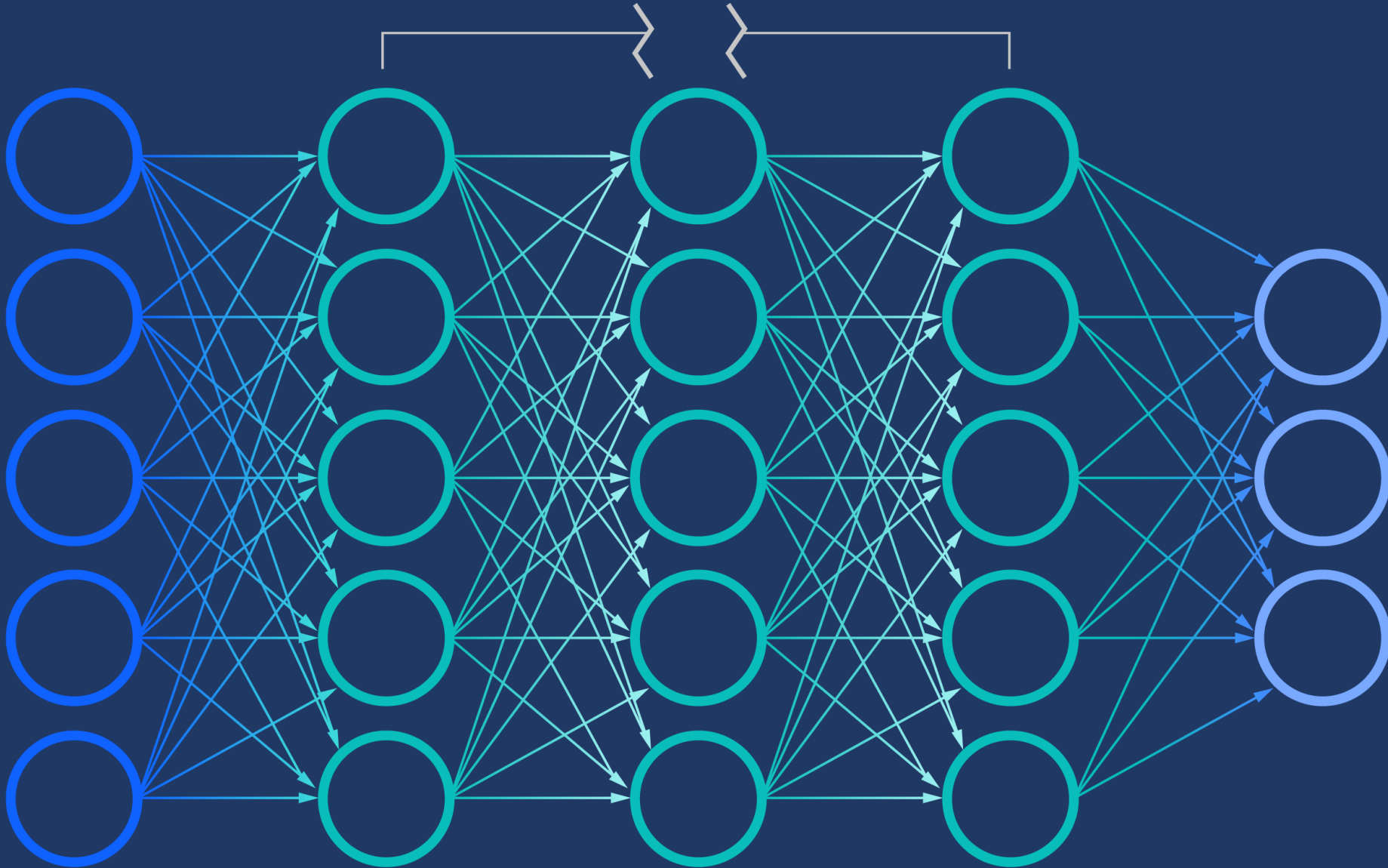


Deep neural network

Input layer

Multiple hidden layers

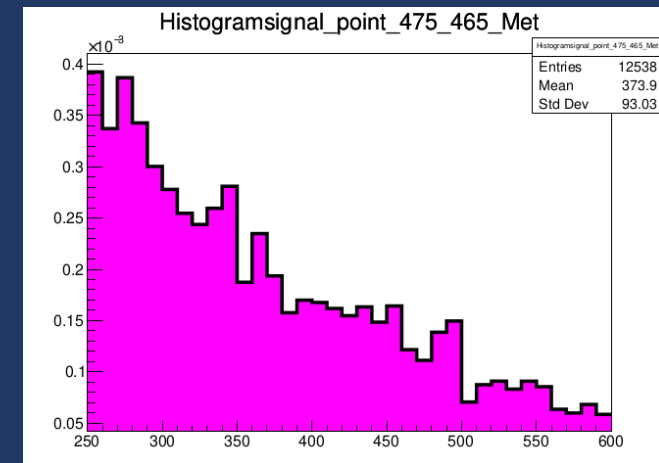
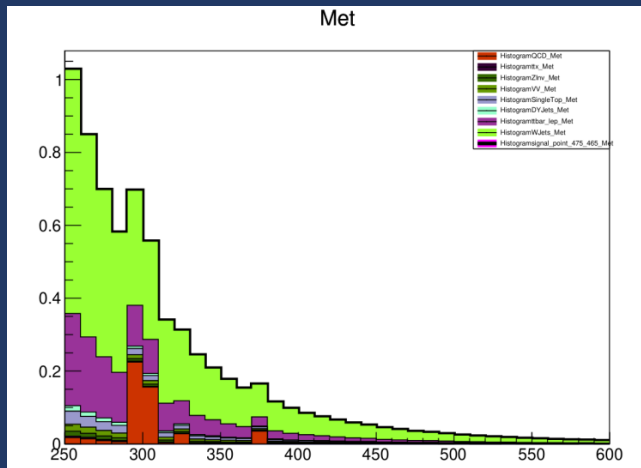
Output layer



Output

0

1

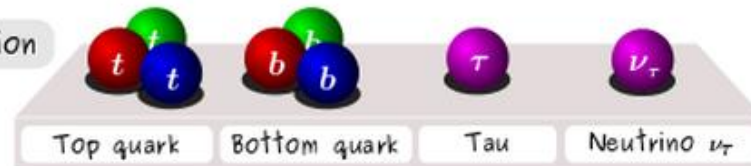


PARTICLES

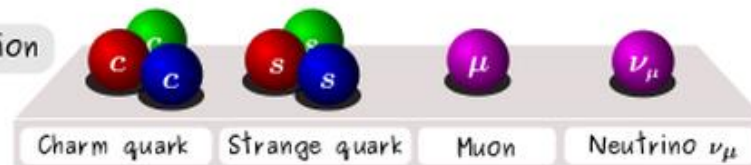
Quarks

Leptons

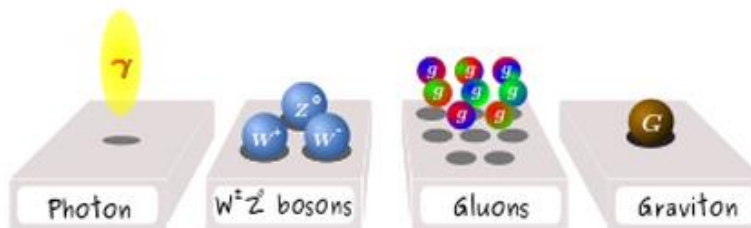
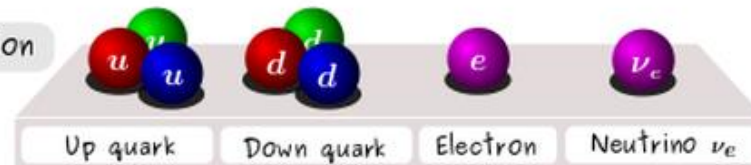
3rd generation



2nd generation



1st generation



SPARTICLES

Squarks

Sleptons

