Findings:

The PhotonK in noon is actually the Vector meson Energy.

* Please look at the “exData.root” File here
  + PhotonK is calculated using the relation
  + vmEnergy is the vector Meson Energy. This is gotten from the “vm.Energy()”. From the “example\_Pb.root” file.
  + Both the histograms are similar with same range in energy and have a similar structure.
* As can be seen from the figures below they have similar mean and standard deviation.
* My conclusion is that the PhotonK and vmEnergy are same
* The above eqn related rapidity and vector meson energy.

TO CHECK:

* First Run the sartreUPCRuncard.txt
* Then run exDAta.C
* It should generate these images.
* Below are both the histogramsA graph showing the number of data

  Description automatically generatedA graph of energy with text

  Description automatically generated