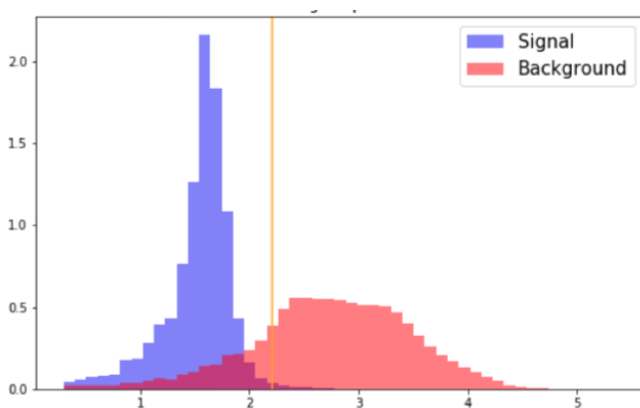


Machine Learning in physics

Ken

March 29, 2018

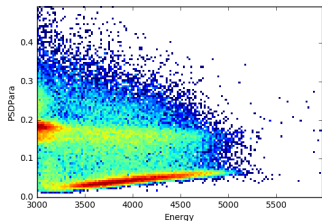
common Problem of discrimination between signal and background



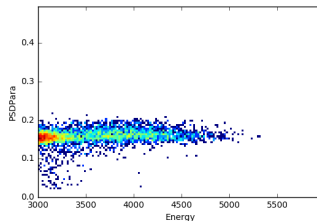
Not always, you define a cut condition where surviving cut there can have perfect 99% signal with 1% background. Small "features" might not be obvious, making it difficult to notice.

Current progress

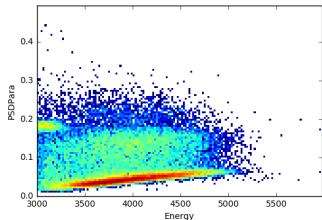
I am able to reproduce the separation using ONLY waveform itself.
Working on a better method on the gaussian tail. Ratio4us vs.
Energy



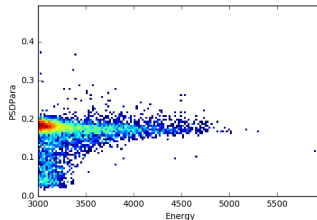
all



Ref

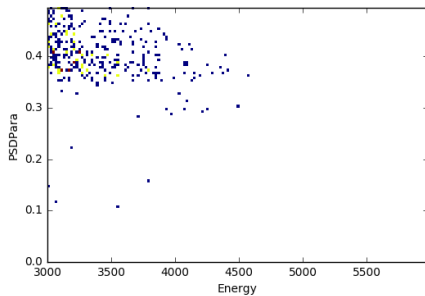


DP

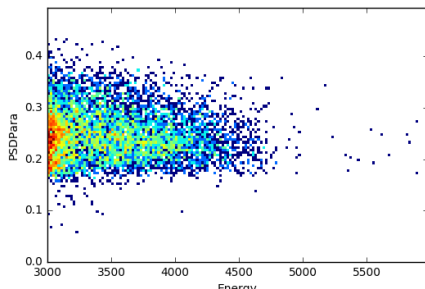


Ref?

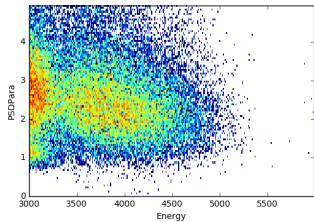
Ratio4us vs. Energy



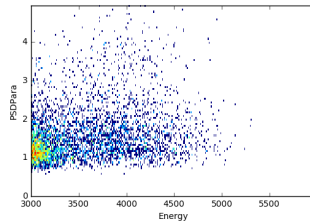
LS



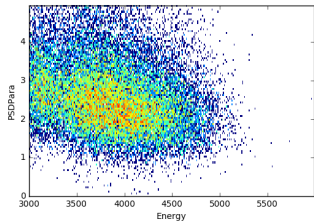
PSDPara[1] vs. Energy



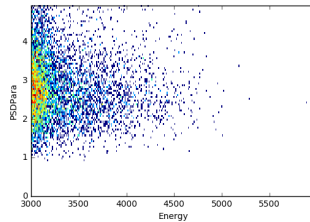
all



ref

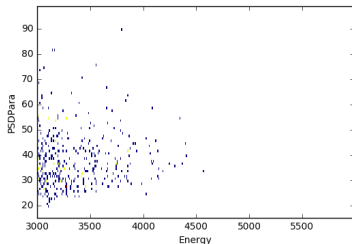


DP

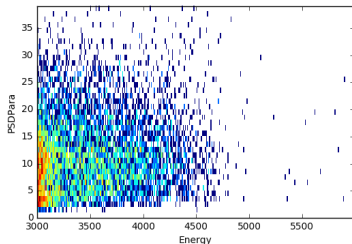


ref?

PSDPara[1] vs. Energy



Is



Is+beta

- I intend to this method for the new bolometer, since there is a desire for me to get the NTD Ge working possibility with vibration/electrical noise studies etc.