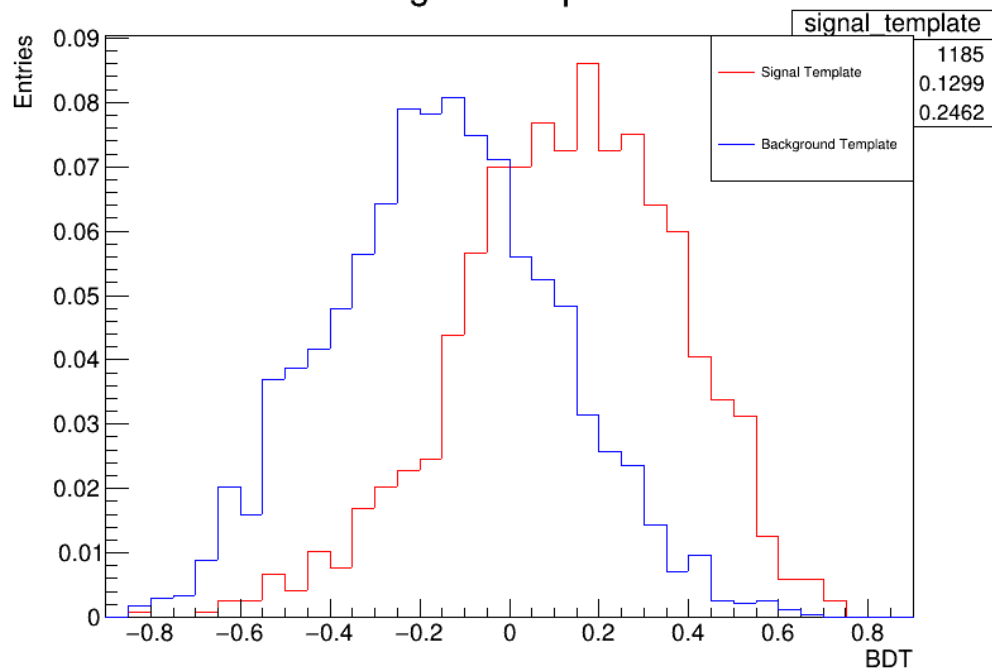# Template fit (play)

BDT (test/train) root file of the approach 1 are used.

16/12/2024

Fit function

```python
#fitting function as a linear combination of signal and background
def template_fit(x, par):
    return par[0] * signal_template.GetBinContent(signal_template.FindBin(x[0])) + \
           par[1] * background_template.GetBinContent(background_template.FindBin(x[0]))

fit_function = ROOT.TF1("fit_function", template_fit, -1, 1, 2)
fit_function.SetParameters(0.5, 0.5)  # Initial guesses for the coefficients
```