Classification

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Abstract goes here.

I. INTRODUCTION

In our introduction we want to start from big picture (LIGO, ML, pipelines) and narrow down to what work we are presenting here and why it is important. We also describe in which ways it is novel and how it compares to previous works like in [?]. We may also want to cite [?].

II. IMPROVING BINARY CLASSIFICATION THROUGH ML

In this section we may want to expand on the idea of using classification itself. We should mention which algorithms we attempted to use and why they did not work. Then we can talk more in detail about the ones that did work in the following subsections. [1]

A. Random Forest (RF)

B. Neural Networks (NNs)

III. DATA CONDITIONING

We should in principle condition the data in the same way but any differences can also be described here.

IV. RESULTS

Here we talk about overall results and specifically from each algorithm in the subsections below.

A. RF

B. NN

V. CONCLUSIONS

Reiterate why what we did is important and how it improves current knowledge.

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[1] We may want to add a footnote here and there.