

# **mcfm-bridge development**

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# **Input file development**

# Main reasons

- 1) User unfriendly interface**
- 2) All parameters are “hardcoded” in a source file**
- 3) Parameters are scattered in the code**
- 4) to change a input value one ha to recompile mcfm-bridge and MCFM itself.**

# Input file structure

In certain place(probably in bin directory) will be a “grid\_setup.txt” file:

```
1.0e-9      'xLow'  
1.0          'xUp'  
1            'nloops'  
basic        'pdf_fun'  
-smth        'glab'  
42250000  'q2Up'  
1.0          'q2Low'  
20           'nQ2bins'  
5             'qOrder'  
40           'nXbins'  
0             'xOrder'  
1             'nGrids'
```

"Custom binning"

```
'Observable_name numberBins bin1 bin2 bin3 ...'  
Eta_I 11 0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.85 2.1 2.4
```

# Current status

- **The algorithm is ready**
- **Classes**
- **Last stage**

# Next steps

- **Parameter scan**
- **Investigation discrepancy**
- **Implementation of nnlo parts**