

## Section 1

# Collider simulation of the MDM model

In this appendix, we explain the procedure we have adopted to implement the MDM model into the numerical calculation performed in ??.

In the Listing 1, we show a part of our `FeynRules` model file `mdm.fr`. This corresponds to the necessary additional description to the SM model file `sm.fr` to take account of the 5-plet fermion.

Listing 1: `mdm.fr`

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```
1 #include<stdio.h>
2 int main(){
3     printf("Hello world!");
4 }
```

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