TITLE

by

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Abstract

ABSTRACT

Primary Reader: Andrei Gritsan

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Acknowledgements

THANKS TO

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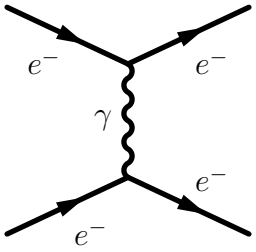

Figure 1.1: Feynman diagram depicting electron-electron scattering via the electromagnetic interaction.

Chapter 1

Introduction

This is a sample equation:

$$\mathscr{L}_{EM} = \bar{\psi}\left(i\gamma^{\mu}(\partial_{\mu} + ieA_{\mu}) - m\right)\psi - \frac{1}{4}F_{\mu\nu}F^{\mu\nu}. \tag{1.1}$$

This is a sample Feynman Diagram:

This is a sample table:

particle	Q	T_3	Y_W	colored
e_L, μ_L, τ_L	-1	-1/2	-1	no
e_R, μ_R, τ_R	-1	0	-2	no
ν_L	0	1/2	-1	no
u_L, c_L, b_L	2/3	1/2	1/3	yes
u_R, c_R, b_R	2/3	0	4/3	yes
d_L, s_L, t_L	-1/3	-1/2	1/3	yes
d_R, s_R, t_R	-1/3	0	-2/3	yes

Table 1.1: List of SM particles and their charges. Q represents the charge of the $SU(1)_{em}$ gauge symmetry, T_3 the broken SU(2) gauge symmetry, and Y_W the broken U(1) gauge symmetry.

Chapter 2

Conclusions

This is a reference to a previous section: 1

This is a sample citation [1]

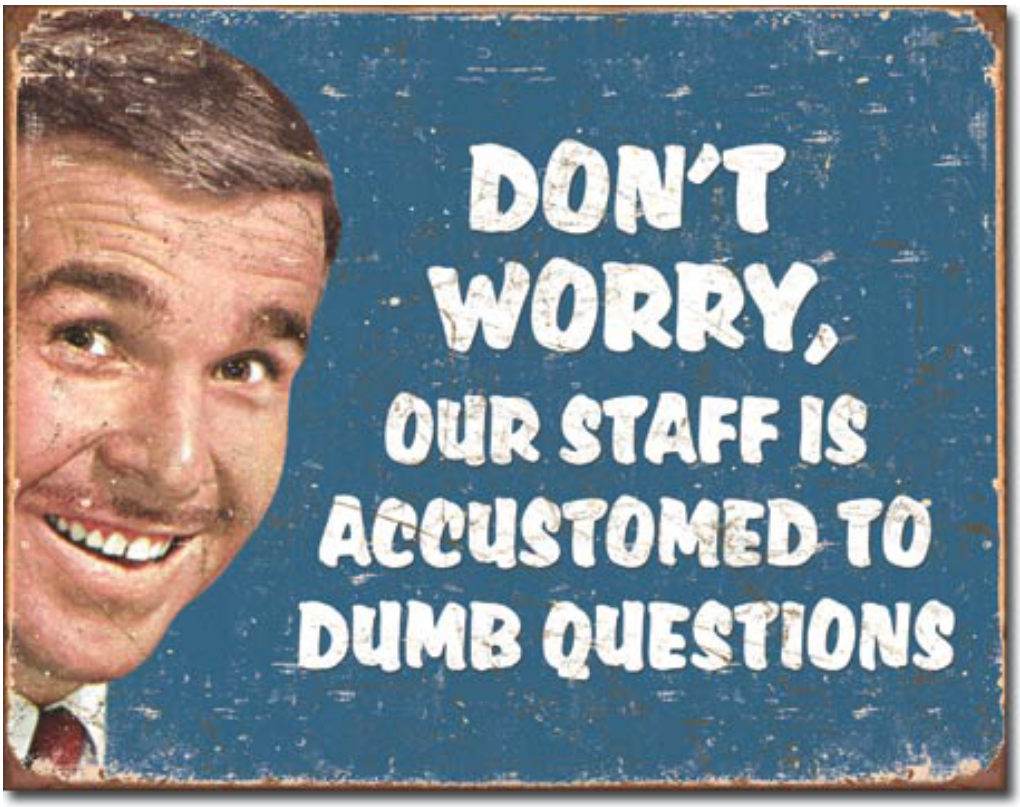

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Figure 2.1: This is a sample figure

Bibliography

[1] "Study of the spin of the new boson with up to 25 fb^{-1} of ATLAS data," 2013.

Vita