Symbolic Computation for Modern Physics

by

Jane Doe

Submitted to the Department of Physics
in partial fulfillment of the requirements for the degree of

DEGREE_NAME

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

January 2026

Thesis Supervisor: Prof. Richard Feynman

This thesis presents novel approaches to symbolic computation in physics.

Chapter 1

Introduction

This thesis explores symbolic computation in physics apply to Einstein equation:

$$E = mc^2$$

Chapter 2

Methods

We employ the quadratic formula for root finding:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Our results are summarized below:

Chapter 3

Conclusion

This work demonstrates the power of symbolic methods.