Project 3 - FYS3150*

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An abstract

I. INTRODUCTION

An introduction.

II. THEORY AND METHODS

A. Newton's law of gravitation

Newton's law of gravitation states for two objects of mass m_1 and m_2, the force on object 1 from object 2 is given by [1]

$$\boldsymbol{F} = \frac{Gm_1m_2}{r^2}\boldsymbol{u_r} = \frac{Gm_1m_2}{r^3}\boldsymbol{r} \tag{1}$$

where G is the gravitational constant and $\boldsymbol{r}$ is a radial vector pointing at object 2. $r = |\boldsymbol{r}|$ is the distance and $\boldsymbol{u_r} = \boldsymbol{r}/r$ is a radial unit vector.

B. The second part

$$1 = 1 \tag{2}$$

C. The third part

A reference

III. RESULTS AND DISCUSSION

A. First subpart

An equation reference

B. Second subpart

More text.

IV. CONCLUSION

Do stuff.

V. APPENDIX

All code used is available at: The programs used in this project are listed in this section:

main.cpp: Program1

plot.py: Program2

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[1] All theory in this project adapted from FYS3150 Project 3 (Fall 2016) *linkname*.