# ResearchTools Hw1

Ryan Hill

September 14, 2018

**Abstract**

This is an abstract. In my experience, abstracts usually take longer to write than one would think. One may say, oh, it's just an easy abstract that describes the important aspects of your paper. Then, you find your self spending hours on a stupid little abstract, that seems to have more importance than the paper it is describing. This time could be better spent training as a solider of the Galactic Empire, but no I'm just a lonely Galactic Empire scientist, who does believe in the force.

## 1 Introduction

The Galactic Empire, more recently known as the First Order, has ignored the great wisdom of one of the greatest sith Lords, Lord Vader. Lord Vader, predicted the failure of each death star that was built and lobbied for the better use of the Empire's resources. The various sizes of the death stars can be seen in figure 1.

Some of the most well known failures of the Galactic Empire are listed in table 1. I purpose that we use our resources to design a weapon that harness the strength of the force, as was the vision of Lord Vader.

Figure 1: The various Deathstars



**DEATHSTAR I**

MANUFACTURER : IMPERIAL DEPARTMENT
OF MILITARY RESEARCH
SIENAR FLEET SYSTEMS
MODEL : DS-1 ORBITAL BATTLE STATION
CLASS : DEEP-SPACE MOBILE BATTLESTATION

TECHNICAL SPECIFICATIONS
SPHERICAL : 120 KILOMETERS IN DIAMETER
MGLT : 10 MGLT

ARMAMANT
CONCAVE DISH COMPOSITE BEAM SUPERLASER (1)
RANGE: 47,060,000 KILOMETERS
TAIM & BAK D6 TURBOLASER BATTERIES (5,000)
TAIM & BAK XX-9 HEAVY TURBOLASERS (5,000)
SFS L-S 4.9 LASER CANNONS (2,500)
BORSTEL MS-1 ION CANNONS (2,500)
SB-920 LASER CANNONS
PHYLON TRACTOR BEAM GENERATORS (768)
CHARGED-PARTICLE BLASTERS
MAGNETIC RAILGUNS
PROTON TORPEDO BANKS
SURFACE CANNON

**DEATHSTAR PROTOTYPE**

MANUFACTURER : IMPERIAL DEPARTMENT
OF MILITARY RESEARCH
MODEL : DEATH STAR PROTOTYPE BATTLESTATION
CLASS : BATTLESTATION

TECHNICAL SPECIFICATIONS
SPHERICAL : 120 KILOMETERS IN DIAMETER

ARMAMENT : CONCAVE DISH COMPOSITE
BEAM SUPERLASER

( DEATH STARS SHOWN TO SCALE )

**DEATHSTAR II**

MANUFACTURER : IMPERIAL DEPARTMENT
OF MILITARY RESEARCH
MODEL : DEATH STAR II BATTLESTATION
CLASS : BATTLESTATION

TECHNICAL SPECIFICATIONS
SPHERICAL (INCOMPLETE) : 160 KILOMETERS
IN DIAMETER
MGLT : 20 MGLT

ARMAMENT
CONCAVE DISH COMPOSITE BEAM SUPERLASER (1)
TURBOLASER BATTERIES (15,000)
HEAVY TURBOLASER BATTERIES (15,000)
LASER CANNONS (7,500)
ION CANNONS (5,000)
TRACTOR BEAM GENERATORS (768)

Table 1: The Failures of the Galactic Empire

| 1 | Deathstar 1 |
|---|---|
| 2 | Deathstar 2 |
| 3 | Base on Scarif |

# 2 Experiments

## 2.1 Experiment 1

In experiment number 1, we see that equation 1 tells us how much resources we are wasting. Building non-force enabled weapons waste the resources of the Galactic Empire on large weapons, such as, the death star.

$$f(x, y) = \sqrt{x^2 - y^2} \tag{1}$$

Using Sith force math, from equation 1 we arrive at $g_{inv} = \frac{1}{x^2 + y^2}$ which tells us something about the force.

## 2.2 Experiment 2

This is another force paragraph, which is like a force ghost, but for papers. Equation 2 tells is something about the force, but who knows what exactly.

$$\sum_{i=0}^{n} n^2 \tag{2}$$

This paragraph is about equation 3, which is just an array.

$$\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{pmatrix} \tag{3}$$

The final paragraph about a force equation is equation 4.

$$a_0 \cfrac{1}{a_1 + \cfrac{1}{a_2 + \cfrac{1}{\ddots + \frac{1}{a_n}}}} \tag{4}$$

# 3 Conclusion

One can see clearly from equation 1, that we must stop wasting the resources of the Galactic Empire.

As Galactic Empire engineers and scientist, it is up to us to stop the rebel scum by creating weapons that use the force. We may still be able to secure the legacy of Lord Vader's brilliance.