

# Homework 3: L<sup>A</sup>T<sub>E</sub>X

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## Abstract

This morning, I ate a slice of whole wheat toast with almond butter, chia seeds, flax seeds, and some blueberries. And I drank coffee, of course.

## 1 Lists

### 1.1 Things I Enjoyed About This Class

- Meeting and interacting with other Astro and Physics majors.
- Being able to do anything but Charman homework for two hours a week.
- Getting access to the lab. Everyone knows that the number of rooms and buildings that you have keycard access to directly signifies your success.

### 1.2 Things I Did Not Like About This Class

1. I still feel like I don't know much IDL..... which is more my fault than yours, and obviously kind of expected since this is just a decal and not designed to make us all proficient programmers.
2. Github.
3. Github.
4. Github.
5. Github.

## 2 Euler-Lagrange Equation

$$\sum_{j=1}^n (-1)^j \partial_{\mu_1 \dots \mu_j}^j \left( \frac{\partial \mathcal{L}}{\partial f_{i, \mu_1 \dots \mu_j}} \right)$$

where summation over the  $\mu_1 \dots \mu_j$  is implied according to Einstein notation.

## 3 Table

Favorite Foods	Favorite Bands	Favorite IDL Commands
Almonds	The Shins	tvsl
Avocado	Real Estate	mrdfits
Blueberries	Local Natives	plot

Table 1: My favorite genres of music are indie folk or alternative rock, but I generally like anything mellow and dreamy with good vocals.

## 4 My Pretty Plot

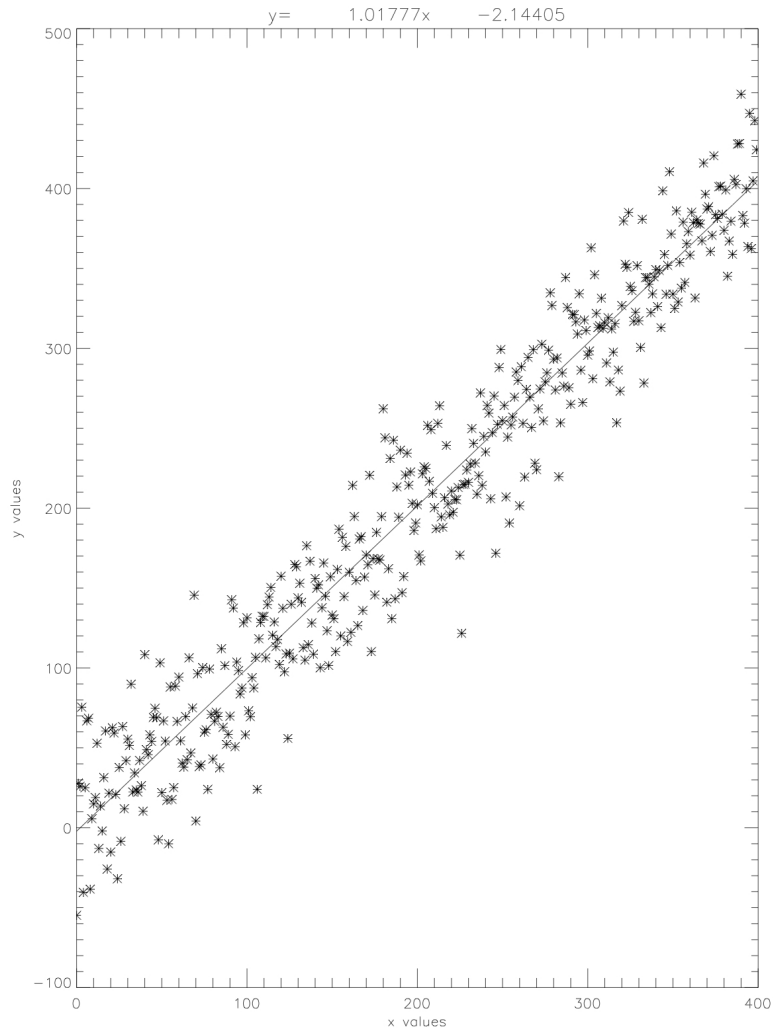


Figure 1: This plot is from my least-squares regression tutorial. I like it because I used stars for the scatterplot points and it came out looking nice. I struggled to scale my axes correctly, but once I figured that out, everything about that tutorial was simple and applicable.

## 5 My Favorite Things

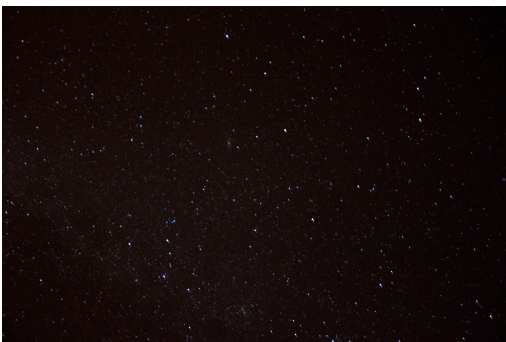


Figure 2: A crappy picture of the stars from Lick Observatory

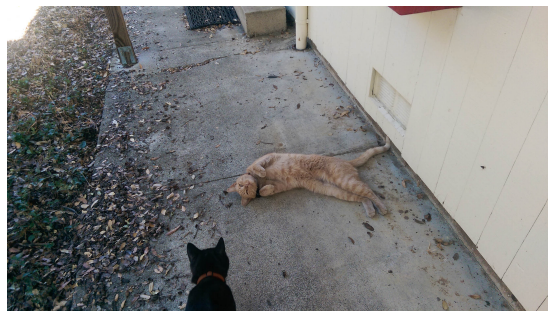


Figure 3: Really cute cats at Lick Observatory