# Curriculum Vitae - Ethan Taylor

36 Rees Gardens

E.D.Taylor@hotmail.com

Top Valley Nottingham

NG5 9JJ Phone: 07480470882

Education

## Northumbria University

MPhys Physics with Astrophysics: 2016 - 2020

Year 1 Average: 70%, Year 2 Average: 73%, and Year 3 Average: 63%

4th Year Dissertation:

'Numerical investigation into non-linear MHD wave behaviour in a stratified, coronal atmosphere'

My final Masters year project was to investigate the behaviour of how Magnetohydrodynamic (MHD) waves behave in both a uniform and a stratified atmosphere. This was done using a pre-built code package by the name of 'Lare2d' which is written in the 'Fortran-90' language. The data sets that these simulations produced were then visualised and analysed using IDL (interactive data language). This dissertation was under the supervision of Professor James McLaughlin.

3rd Year Dissertation:

## 'A Review of theoretical Dark Matter Models'

My third year dissertation looked at the problem of the missing matter within the universe. A review of the different models that offer an explanation for this ranging from Modified gravity to new particles, where the project ultimately took a closer look at the Axion. The project then looked at the equations that build this model and attempted to link the physical meaning behind the results to possible observations and what environments they would be found in. This dissertation was under the supervision of Dr Eamon Scullion.

BEng Electrical and Electronic Engineering: 2015 - 2016

Year 1 Average of 73%

Bilborough College (A Levels): 2013 - 2015

A2: Physics, Maths, Electronics

As: Computing

Work Experience

### GCSE Student Mentor at Top Valley academy: 2014 - 2015

Supported GCSE students with their studies helping them be prepared for their exams Taking a group of students and supporting them with revision sessions based around

what topics they were struggling with

Planned revision sessions based around what struggling students needed help with

Skills

C, C#, Python, MATLAB, Fortran-90, VB.NET,  $\LaTeX$  , Various Microsoft Office

Packages

Achievements

3x Progression Scholarship.

10th out of 531 participants in the UK, 29th out of 4514 globally in the Credit

Suisse global coding challenge 2019.

Sports

#### Northumbria University

University Boxing Team Captain: 2019 - Present

Relaying information between the university and the club in a timely manner Making sure members filled out any paperwork that is needed to compete

Making sure all paperwork relating to attendance and health and safety is filled out

properly each session

References

Dr Eamon Scullion

Mathematics, Physics and Electrical Engineering

Northumbria University

Eamon.Scullion@Northumbria.ac.uk

Dr Rodrigo Ledesma-Aguilar

 ${\bf Mathematics,\, Physics\,\, and\,\, Electrical\,\, Engineering}$ 

Northumbria University

Rodrigo.Ledesma@Northumbria.ac.uk