# William Eaton

we3822@princeton.edu | +44 7764702875

#### Education

#### University of Oxford, UK

(2016 - 2021)

Integrated BA and MEarth Sci in Earth Sciences - First Class Honours

#### John Hampden Grammar School, High Wycombe, UK

(2009 - 2016)

A Levels (4 A\*s), AS Level (1 A) and GCSE's (10 A\*s, 2 As)

### Research Experience

#### MEarth Sci Research Project

(2020 - 2021)

'Seismic scattering on Mars, Earth, its moon and a supercomputer'

- Investigating physical parameters facilitating a transition from ballistic to diffuse scattering behaviour of elastic waves.
- Numerical wave propagation through 3D heterogeneous media using AxiSEM3D.
- Development and application of novel analytical techniques such as (moving-window) multi-scale entropy to synthetic seismograms.
- Analysis of Lunar Apollo and Martian InSight seismic data using these novel techniques to compare scattering behaviour.
- Supervised by Professor Tarje Nissen-Meyer.

## Independent Extended Essay

(2020)

'Seismic heterogeneity and anisotropy in Earth's inner core and the implications for inner core dynamics'

- o Independent literature research project to produce 4000-word, review-paper-style extended essay.
  - Skills gained in critical analysis of publications and synthesis/processing of publically-available data.

### Geological Mapping project

(2019 - 2020)

'Geology and tectonic history of Saint-Chinian, Languedoc, France'

• Independent 6-week fieldwork project studying bedrock and collecting samples over 21 km², followed by sample analysis culminating in 5000-word report.

#### **Data Analysis Internship**

(March 2018)

Vale of White Horse District Council, United Kingdom

 Analysis of a five-year NO<sub>2</sub> time-series using MATLAB. Results presented to the Council's Air Quality Officers to assist policy-making on local environmental issues.

#### **Academic Awards and Prizes**

## Shell Prize - Dept. of Earth Sciences, University of Oxford

(2021)

Best overall performance in Earth Sciences Final Honours School.

Schlumberger Prize - Dept. of Earth Sciences, University of Oxford

(2021)

Best 4<sup>th</sup> Year performance in Geophysics.

Gibbs Prize - Dept. of Earth Sciences, University of Oxford

(2020)

Best undergraduate independent research (geological mapping) project.

Burdett-Coutts Prize - Dept. of Earth Sciences, University of Oxford

(2020)

Best overall  $3^{\rm rd}$  Year performance in Earth Sciences Final Honours School.

#### Academic Exhibition and Scholarship - University College, Oxford

(2017; 2019, 2020)

Exhibitioner (2017) and Scholar (2019, 2020) status awarded in recognition of academic excellence.

Keith Cox Prize - Dept. of Earth Sciences, University of Oxford

(2019)

Best 2<sup>nd</sup> year fieldwork during Assynt fieldtrip, Scotland.

International Seismological Centre Prize - Dept. of Earth Sciences, University of Oxford

(2018)

Best 1<sup>st</sup> Year student in Mathematics and Geophysics.

Programming skills: Proficient writing scientific scripts, functions and packages in Python and MATLAB.

Experience with Linux environments and Git.

Computing skills: Data-visualisation using ArcGIS PRO, QGIS, ParaView and Adobe Illustrator.

Competent using LaTeX and Excel.

Fieldwork experience Extensive fieldwork experience in Assynt, Arran, Dorset and Pembrokeshire (UK) and Saint-

Chinian (France).

Remote fieldwork and analysis of central Greece.

# Extra-Curricular projects, Societies, Committees and Voluntary Work

# TETHYS (Talks on Earth Science Topics Hosted by Young Scientists)

(2020 - Present)

Co-founder and Seminar Host

- New seminar series showcasing recent-graduate and undergraduate research.
- Goals to facilitate networking and expand the scope and accessibility of seminars available to undergraduates.
- Two semesters of seminars completed with 20 speakers from 11 UK and international universities.

#### Fieldwork and Academic module seminars

(2019, 2020)

Organiser and Host

• Independently-organised talks to Earth Science students, advising on topics such as fieldwork projects (2019, 2020) and optional undergraduate modules (2020).

### Oxford University Geological Society Committee

(2017 - 2020)

Social Secretary (2017 - 2018) and Treasurer (2019 - 2020)

• Coordinating internal and external events and overseeing finances.

The Sollas (2017 - 2018)

President

• Peer-elected president organising geological fieldtrips, lectures, networking events and liasing with alumni.

University Open Day (2017 - 2020)

Student Ambassador

• Providing student tours to prospective applicants within the Earth Sciences department.

#### **Conference Attendances**

American Geophysical Union Fall Meeting 2020 (Virtual attendance)

(1st - 17th December 2020)

### **Professional Society Memberships**

American Geophysical Union

(January 2021 - Present)

Seismological Society of America

(February 2021 - Present)