

Edmund Henley

Space physicist with extensive quantitative research experience, excellent communication skills and a confident, international outlook.

✉ edmund@edmundhenley.com
Age: 28
Nationality: *British*
References and further details: *On request*

PhD My PhD in space physics (Imperial College London, Sep 2006-Oct 10, awarded Jan 11) used data from the four Cluster satellites to examine how the surface of Earth's bow shock varies. This helps determine whether or not similar astrophysical shocks are a plausible source for cosmic rays.

Quantitative techniques used:

Time series analysis, including selection, cleaning and manipulation of data from multiple sources; wavelet filtering, multiple (multivariate) regressions and extensive data visualisation.

Communication

PhD research presented at many international meetings and workshops (AGU, San Francisco, Dec 08; ISSI, Bern, Apr 08, 09; MIST, London, Nov 07, 08), at a House of Commons event for young scientists (SET for Britain, London, Mar 10) and several outreach events.

In 2007 I taught 1st year laboratory students, creating and supervising projects on building a physical random number generator and magnetometer. I was also the physics department postgraduate representative, representing PhD interests at staff-student meetings and organising social events.

Awards:

One of five ESA grants to attend the 15th Cluster workshop in Tenerife, Spain (Mar 2008).

1st prize in a poster competition for Imperial research students (Jul 08).

Research & work experience Space and atmospheric physics group, Imperial College London; visiting researcher; Feb 2011-present.

Cluster laboratory, Imperial College London; research associate; Nov 2010-Jan 2011. *Calibrated magnetic field data from the Cluster satellites; developed software to remove bad data intervals. This position required both independent work and teamwork with laboratory colleagues, as well as regular team meetings to review progress and goals.*

Swedish Institute for Space Science, Kiruna; space physics summer school student; Aug 2005.

Southampton Oceanography Centre; summer school student; Jul-Aug 2003. *Studied models of ancient coastlines and helped deploy an experimental high-resolution 3D sonar.*

Astrophysics group, Imperial College; assistant researcher; Jul-Aug 2002. *Simulated detection of WIMP dark matter particles, and tested an aspect of the LISA project looking for gravitational waves.*

Southern Oxford School, Villarrica, Chile; English teacher; Mar-Jun 2001.

Various short-term jobs in Geneva from Jul-Dec 2000. *Banking intern at Lombard Odier, data entry and finance at Iomega and personal assistant at Radcliffes Trustee Company.*

Education Mandarin language programme; Tsinghua University, Beijing, China; 2005-06.

Physics MSci; Imperial College London; 2001-05; First Class Honours.

Included courses in plasma, space, and atmospheric physics; also astrophysics, cosmology and biophysics. My MSci project studied self-organised criticality using a computer model of a rice-pile.

IB Bilingual Diploma May 2000; International School of Geneva; 1993-2000; 41 points (/45).

Subjects: Physics, Chemistry and Maths Higher; Geography, English and French Standard.

Journalism I have been involved in student journalism since school, continuing at university: in 2002-03, I created and edited a regular international page for Felix, Imperial's student newspaper.

During my PhD, I copy-edited Felix for 3 months, and was the science editor for 1½ years (2007-08).

The late-night shifts and attention to detail and deadlines this required were rewarded when Felix won the Guardian student newspaper of 2008 award. Portfolio: www.edmundhenley.com/portfolio

Skills Other languages: Fluent French (IB A2), strong Spanish (IGCSE, 7 months in South America, 2001), good basic Mandarin (HSK level 3).

Programs: Matlab, Office suite, Origin, C++, Photoshop, InDesign, Quark Express.