

Denise Helen Spangler

Contact Details

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Career Interests

Research and analysis involving:

- Sustainable development in business and government.
- Climate change research.
- Reduction of greenhouse gas emissions.

Education

Ph.D. Physics, Durham University, June 2008

B.S. Physics with Astronomy minor, University of California, Santa Cruz, 2004

Notre Dame High School, Sherman Oaks, California, 1999. Academic honours: GPA 4.02

Employment

Environmental Sustainability Officer

October 2008 - present

Durham City Council, Environmental and Leisure Services: Durham, England

- Quantative research involving:
 - The reduction of CO₂ emissions for council services requiring a large number of vehicles.
 - Analysis of depot placement in Durham County.
- Using Geographic Information System (GIS) for data analysis.
- Providing regular updates through meetings and presentations with council managers.
- Writing a final report summarising results.

Technician Assistant

May 2003 - March 2004

Santa Cruz Institute for Particle Physics: California, USA

- Electronics testing and data quality checking for the ATLAS particle physics experiment on the Large Hadron Collider (LHC).

Other Experience

Conferences

- **Presentation** for Low Carbon Economy Conference: Newcastle, England. April 2009.
- 2005-2008: 7 physics related presentations.

Durham Taekwondo Club

2006 - present

Assistant Instructor (2008 - present); **Treasurer** (2007 - 2008); **Events Officer** (2006 - 2007).

- Developed the club by recruiting members, organising events, and helping teach classes.

Expert Telescope Observer

Aug. - Sep. 2006 & Feb. 2007

- In charge of running gamma-ray telescopes in Namibia as a part of my PhD.
- Led a team and solved problems regarding the operation of the telescopes.

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Voluntary Work

Environmental Sustainability Officer

May - October 2008

Durham City Council, Environmental and Leisure Services: Durham, England

- Analysed customer opinion surveys for refuse and recycling.
- Calculated the carbon footprint for all council fleet vehicles.
- Developed a CO₂ emissions research project for my self-employment.

Administrative Assistant

June - September 2008

Royal Society for the Protection of Birds (RSPB): Newcastle, England

- Performing various administrative duties such as filling, mail mergers, and data entry.
- Gained knowledge in conservation issues.

Basingstoke Canal Restoration

July 2008

Waterway Recovery Group: Basingstoke, England

- Canal restoration work, which involved working as a part of a team and an awareness of safety hazards in an outdoor site.

Physics Outreach

2005 - 2007

Durham University: Durham, England

- Created and ran workshops for children. Workshops varied in subjects from astronomy to general relativity and had to be pitched to kids with little background on the subjects.
- Demonstrated fun science experiments to the general public involving light and energy.
- Helped build and demonstrate a gamma-ray astronomy exhibit for the Royal Society Science Exhibition in July 2007.

Skills

Technical Skills

- Geographic Information System (GIS) analysis tools.
- Working knowledge of C and FORTRAN computer languages.
- Proficient in Windows and LINUX.
- Conversational Spanish.

Transferable Skills

- Extensive quantitative analysis with large amounts of data.
- Extensive research skills.
- Report writing.
- Giving oral presentations.
- Working well in a team and independently.

Honours and Awards

University Doctoral Fellowship, Durham University, October 2004 - 2007.

Denise Helen Spangler – References

Mr. Jonathan Elmer: Environmental Sustainability Manager

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