

# CURRICULUM VITAE

## PERSONAL INFORMATION

*Name:* Andrew M. Taylor  
*Place of Birth:* Oxford, UK  
*Date of Birth:* March 18, 1981  
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## AREAS OF RESEARCH SPECIALIZATION

- Gamma-ray Astrophysics and emission processes
- High-Energy Cosmic Rays
- High-Energy Neutrino Astrophysics

## EMPLOYMENT

### Present Employment

*Job Title:* Schroedinger Fellow at the Dublin Institute for Advanced Studies, Ireland  
*Start date:* 01/08/2012  
*Job description:* Research centered on: cosmic ray propagation transport and energy losses; probes of cosmic ray source distribution; AGN acceleration and emission processes. Referee for International Periodicals. Co-supervisor of PhD and masters students. Organiser of Colloquia.

*Job Title:* H.E.S.S. extragalactic group Convener, Leader of HESS-II first results task force.  
*Start date:* 01/09/2016  
*Job description:* Coordination of the activities of more than a 100 researchers around the world regarding extragalactic studies within the H.E.S.S. Collaboration: Organisation of fortnightly meetings, planning of the observation schedule for each season of H.E.S.S. and supervision of the development of different task forces to ensure that the projects proceed to fruition through publication.

**Past Employment**

- Aug 2009 - Jul 2012* PostDoctoral Researcher  
ISDC, University of Geneva, Switzerland
- Jan 2007 - Jul 2009* PostDoctoral Researcher  
MPIK, Heidelberg, Germany

**EDUCATION**

- Apr 2007* PhD in Astrophysics, University of Oxford, UK
- Sep 2003 - Dec 2006* Graduate Student, PPARC  
University of Oxford, UK  
supervisors: Prof. Subir Sarkar and Prof. Joe Silk
- Aug 2004* SLAC Summer Institute  
Stanford, California, USA
- Sep 1999 - Jun 2003* 1st Class Degree, Master of Physics,  
Undergraduate Student, Pembroke College  
University of Oxford, UK

**REVIEW/REFEREE ASSIGNMENTS FOR INTERNATIONAL PERIODICALS**

- Physical Review Letters *2010 - present*, 17 articles reviewed
- Astroparticle Physics *2010 - present*, 5 articles reviewed
- Physical Review D *2011 - present*, 9 articles reviewed
- Nature *2014 - present*, 1 article reviewed
- MNRAS *2015 - present*, 2 articles reviewed
- Physical Review B *2015 - present*, 1 article reviewed

**AWARDS, COMMENDATIONS AND GRANTS**

- Sep 2016* Elected Head Convener for the HESS Extragalactic Group
- Sep 2014 - Sep 2016* Deputy Convener for the Extragalactic Group within HESS collaboration
- Jul 2014* Commendation from external review panel assessing DIAS  
(including Prof. Andrew King and Prof. Jim Pringle): “*For someone at his stage his research output and impact are excellent. He should be well placed to find an academic post by the end of his Fellowship.*”
- Jan 2013* Astroparticle Physics, “One of the Most Valued Reviewers” Prize 2012
- Aug 2012 - present* Schroedinger Fellowship, DIAS, Ireland
- Jan 2011* Physics Letters B, “Most Valued Reviewer” Prize 2010
- Jul 2009* IRCSET 3 year Postdoctoral Grant Awarded
- May 2009* University of Geneva 5 year Postdoctoral Grant Awarded
- Jun 2008* Institute of Physics “Best Thesis” Prize 2008
- Dec 2006* University of Oxford Graduate Symposium Prize
- Sep 2003 - Dec 2006* PPARC Graduate Student Grant Awarded, University of Oxford
- Sep 1999 - Jun 2003* David Rowland Scholarship,  
Pembroke College, University of Oxford, UK

**TEACHING HISTORY**

|                            |  |
|----------------------------|--|
| <i>Dec 2016</i>            | Doctoral Dissertation External Examiner<br>Dublin City University, Ireland   |
| <i>Jan 2013 - Present</i>  | Co-supervisor of PhD Student Carlo Romoli<br>DIAS, Dublin, Ireland   |
| <i>May 2016 - Sep 2016</i> | Supervisor of Fourth Year Student Emma Goodwin<br>Dublin City University, Ireland  |
| <i>Mar 2014 - Apr 2014</i> | Series of 4 Lectures on Astrophysics to Fourth Year Students<br>Dublin City University, Ireland                                |
| <i>Oct 2013 - Apr 2014</i> | Supervisor of Fourth Year Student Antanas Cesna<br>Dublin City University, Ireland   |
| <i>Feb 2013 - Mar 2013</i> | Series of 6 Lectures on Astrophysics to First Year Students<br>Maynooth University, Dublin, Ireland                            |
| <i>Mar 2012</i>            | Series of 2 Lectures on Extragalactic Cosmic Rays<br>Ultra High Energy Cosmic Rays Workshop, Sao Carlos, Brazil                |
| <i>Jul 2011</i>            | Series of 2 Lectures on the Origin and Extragalactic Cosmic Rays<br>High Energy Astrophysics Summer School, Dublin, Ireland    |
| <i>Aug 2010 - Aug 2012</i> | Co-supervisor of PhD Student Celine Tchernin<br>ISDC, University of Geneva, Switzerland  |
| <i>Aug 2008 - Sep 2008</i> | Series of 4 Lectures on Ultra High Energy Particles<br>3rd Cosmic Ray Summer School, Arequipa, Peru                            |
| <i>Sep 2005 - Jun 2006</i> | College Tutorials on Astrophysics and Cosmology<br>Undergraduate Third Year students<br>Queens College, Oxford University, UK  |
| <i>Sep 2005 - Jun 2006</i> | College Tutorials on Electromagnetism<br>Undergraduate First and Second Year students<br>Queens College, Oxford University, UK |
| <i>Sep 2004 - Dec 2004</i> | Cosmology and Astroparticle Physics<br>Undergraduate 4th Year American students<br>Stanford House, Oxford University, UK       |
| <i>Sep 2003 - May 2004</i> | College Tutorials, Undergraduate 1st Year Physics, Biology students<br>Pembroke College, Oxford University, UK                 |

**LIST OF INVITED TALKS**

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|------------------|---|
| <i>July 2017</i> | <b>A Cut-Off Probe of the Acceleration Environment</b><br>Workshop on Plasma Astrophysics, Oxford, United Kingdom |
| <i>June 2017</i> | <b>Future Synergies Between the SKA and IceCube</b><br>EWASS17, Prague, Czech Republic                            |
| <i>May 2017</i>  | <b>Review of Extragalactic High Energy Gamma-Ray Astronomy</b><br>PHOTON17, Geneva, Switzerland                   |
| <i>Dec 2016</i>  | <b>Extragalactic Cosmic Rays above the Iron Knee</b><br>Galactic Cosmic Rays Workshop, Paris, France              |
| <i>Sep 2016</i>  | <b>New Insights into the Extragalactic Magnetic Fields Using Gamma-Ray Blazars</b><br>LAPP, Annecy, France        |

- Sep 2016* **Extragalactic Cosmic Rays above the Iron Knee**  
ECRS2016, Torino, Italy
- Jul 2016* **Extragalactic Rapporteur Talk**  
Gamma2016, Heidelberg, Germany
- Jun 2016* **Detection of VHE Gamma-Rays from AGN close to  $z \sim 1$**   
RICAP16, Rome, Italy
- May 2016* **Extragalactic Cosmic Rays above the Iron Knee**  
GSSI, L'Aquila, Italy
- May 2016* **HESSI/II Extragalactic Source Properties**  
Workshop on Perspectives on the Extragalactic Frontier, Trieste, Italy
- Apr 2016* **Extragalactic Cosmic Rays above the Iron Knee**  
Contested Astrophysics Workshop, Dublin, Ireland
- Mar 2016* **Extragalactic Cosmic Rays above the Iron Knee**  
Next-Generation Techniques for UHE Astroparticle Physics, Chicago, USA
- Dec 2015* **Galactic Outflows, Cosmic Rays, and Non-Thermal Signatures**  
Gamma-Rays and Dark Matter, Innsbruck, Austria
- Sep 2015* **Extragalactic Cosmic Rays in the Knee to Ankle Region**  
HAP, Karlsruhe, Germany
- Feb 2015* **Cosmic Rays, Galactic Outflow, and Non-Thermal Emission**  
GRAPPA Seminar, Amsterdam, Netherlands
- Jan 2015* **A Parameterisation of Gamma-Ray Production Cross-Sections for pp-Interactions in a Broad Energy Range**  
SUGAR Workshop, Geneva, Switzerland
- Oct 2014* **A Galactic Halo Origin for the Diffuse Neutrino Flux Detected by IceCube**  
GSSI Workshop, L'Aquila, Italy
- Oct 2014* **TA vs Auger and the Physics of UHECR**  
GSSI Workshop, L'Aquila, Italy
- Sep 2014* **A Galactic Halo Origin for the Diffuse Neutrino Flux Detected by IceCube**  
NOW 2014, Otranto, Italy
- Aug 2014* **Multi-Messenger Aspects: Composition, Propagation & Acceleration**  
ISVHECRI14, Geneva, Switzerland
- Aug 2014* **A Galactic Halo Origin for the Diffuse Neutrino Flux Detected by IceCube**  
VHEPU, Quy Nhon, Vietnam
- Apr 2014* **Galactic Cosmic Rays**  
DCU, Dublin, Ireland
- Nov 2013* **Probing UHECR with Photons**  
MACROS Workshop, Paris, France
- Sep 2013* **Galactic Cosmic Rays**  
14th ICATPP, Como, Italy
- Dec 2012* **Galactic Cosmic Rays**  
TEVPA Meeting, Mumbai, India
- Nov 2012* **Probing Extragalactic Magnetic Fields**  
EBL Workshop for CTA, Munich, Germany
- Nov 2012* **Requirements on Ultra High Energy Cosmic Ray Sources**  
Governing Board Meeting, DIAS, Dublin, Ireland
- Nov 2012* **Probing Extragalactic Magnetic Fields**  
60th Birthday of Felix Aharonian, Barcelona, Spain

- July 2012* **Extragalactic Background Light and Extragalactic Magnetic Fields**  
Gamma 2012, Heidelberg, Germany
- Mar 2012* **COSMIC RAY PROPAGATION: High Energy Proton and Nuclei Interactions In Extragalactic Space**  
Astroparticle Physics Workshop, IFSC, USP, Sao Carlos, Brazil
- Feb 2012* **The Need For Hard Spectra Sources of Nearby Heavy Cosmic Rays**  
International Symposium on Future Directions in UHECR Physics, (CERN) Geneva, Switzerland
- Dec 2011* **Extragalactic magnetic field constraints from multi-GeV observations of blazars**  
Joint DIAS-OKC Workshop, Dublin, Ireland
- Jul 2011* **The Origin of Extragalactic Cosmic Rays**  
Dublin Summer School on High Energy Astrophysics, Dublin, Ireland
- Jun 2011* **Probing Local UHECR Sources with Nuclei and Gamma-Rays**  
Nusky Workshop on Cosmic Rays and Cosmic Neutrinos 2011, Trieste, Italy
- Dec 2010* **EGMF Constraints from Simultaneous Blazar Observations**  
Workshop on Extragalactic Magnetic Fields 2010, Paris, France
- Oct 2010* **Signatures and Consequences of UHECR Nuclei**  
ICATPP 2010, Como, Italy
- Jun 2009* **Propagating UHECRs- Knowns and Unknowns**  
SOCoR workshop, Norway, Trondheim
- Apr 2007* **High Energy Neutrinos from Astrophysical Accelerators of Cosmic Ray Nuclei**  
NAM 2007, University of Preston, UK

## OUTREACH TALKS AND EVENTS

- Feb 2017* **Discovering the Universe Beyond the Senses**  
Dunsink Observatory, Dublin, Ireland
- Nov 2015* **Seeing the Invisible**  
Dunsink Observatory, Dublin, Ireland
- Nov 2013* **Principles in High Energy Astrophysics**  
Dunsink Observatory, Dublin, Ireland
- Sep 2013* **Seeing the Invisible**  
Culture Night, Dunsink Observatory, Dublin, Ireland
- Mar 2013* **Principles in High Energy Astrophysics**  
Dunsink Observatory, Dublin, Ireland
- Feb 2013* **Very High Energy Astrophysics- Cosmic Labs**  
Trinity College Physics Society, Dublin, Ireland
- Jan 2013* **The Nature of Stars (Our Sun)**  
Grenada Astronomical Society Meeting, St George's, Grenada
- Sep 2012* **Seeing the Invisible**  
Culture Night, Dunsink Observatory, Dublin, Ireland
- Jun 2012* **The Nature of the Sun**  
Solar Festival, Dunsink Observatory, Dublin, Ireland

*May 2006 - Sep 2006*   **Heavens' Kitchen**

Royal Society Summer Science Exhibition 2006

<http://www-astro.physics.ox.ac.uk/~rxt/html/exhibit.htm>

## **LANGUAGE SKILLS**

English (fluent), German (competent), Spanish (competent), French (basic)

## REFERENCE LETTER CONTACTS

### **Professor Felix Aharonian**

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### **Professor Subir Sarkar**

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### **Professor Daniel Hooper**

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