

Biographical Sketch for James H. Buckley

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Professional Preparation:

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| The University of Toledo | Engineering Physics | B.S. 1986 |
| The University of Chicago | Physics | Ph.D. 1994 |
| Harvard-Smithsonian CfA | Physics Postdoc | 1993–1997 |

Appointments:

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| Washington University | Professor | 2005 – |
| Washington University | Associate Professor | 2001 – 2005 |
| Washington University | Assistant Professor | 1997 – 2001 |
| Harvard-Smithsonian CfA | Physicist, F.L. Whipple Observatory | 1993–1997 |
| University of Chicago | Research Assistantship | 1987 – 1993 |

Honors and Awards:

The Academy of Science of St. Louis Innovation Award (2004), Department of Energy, Outstanding Junior Investigator (1998), Shakti Duggal Award - 25th International Cosmic Ray Conference (1997).

Principal Research Activities:

Gamma-ray astrophysics; optical astronomy; astroparticle physics; multiwavelength astronomy; physics of active galaxies; supernova remnants and cosmic-rays; indirect searches for dark matter; GaN-semiconductor detector development; stream-based supercomputing.

Select Publications:

- "Detection of Pulsed Gamma Rays Above 100 GeV from the Crab Pulsar", Aliu, E. et al. (VERITAS Collaboration), *Science*, **334**, 69 (2011).
- "A Connection Between Star Formation Activity and Cosmic Rays in the Starburst Galaxy M82", V.A. Acciari, et al. (VERITAS Collaboration), *Nature* **462**, 770 (2009).
- "Radio Imaging of the Very-High-Energy γ -Ray Emission Region in the Central Engine of a Radio Galaxy", V.A. Acciari, et al. (VERITAS Collaboration), *Science* **325**, 444 (2009).
- "High Energy Astrophysics with Ground-based Gamma-ray Detectors", F. Aharonian, J. Buckley, T. Kifune, and G. Sinnis, *Reports on Progress in Physics* **71**, 096901 (2008).
- "High Quantum Efficiency Ultraviolet/blue AlGaIn/InGaIn Photocathodes grown by molecular beam epitaxy", D.J. Leopold, J.H. Buckley, P. Rebillot, *Journal of Applied Physics* **98**, 043525 (2005).
- "TeV Gamma-Ray Observations of the Galactic Center", K. Kosack, et al. (Whipple Collaboration) *Astrophysical Journal* **608**, L97 (2004).
- "Observability of Gamma Rays from Dark Matter Neutralino Annihilation in the Milky Way Halo", L. Bergström, P. Ullio, and J. H. Buckley, *Astroparticle Physics* **9**, 137 (1998).
- "Limits to Quantum Gravity Effects from Observations of TeV Flares in Active Galaxies", S. D. Biller, A. C. Breslin, J. H. Buckley, M. Catanese, M. Carson, et al., *Phys. Rev. Letters* **83**, 2108–2111 (1999).