

Vita
DAVID P. SALTZBERG
UCLA Department of Physics and Astronomy
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Research Field:

Experimental Particle Physics

Education:

Ph.D., The University of Chicago, 1994, Physics (M.S. 1991)
(Dissertation: “Measurement of the Mass of the W Boson”)
A.B., Princeton University, 1989, Physics

Awards and Recognition:

Fellow, American Physical Society, 2018
Torsten Wiesel Midnight Sun Award, for science communication, 2016
Asteroid “8628 Davidsaltzberg”, named 2015
Antarctica Service Medal, 2006
Dept. of Energy Outstanding Junior Investigator, 2000
NSF Career Award, 2000
Alfred P. Sloan Fellow, 1999
Grainger Foundation Fellow, 1994 (Univ. of Chicago, Physics Dept.)
National Science Foundation Fellow, 1990–1993
Kusaka Award, 1988 (Princeton Univ., Physics Dept.)

Student Awards (for supervised work):

Stephen Hoover: Tanaka Dissertation Award, from APS/DPF (2011)
Peihao Sun: Finalist, Apker Undergraduate Achievement Award, from APS (2015)

Professional Positions:

Faculty Member, Department of Physics and Astronomy, University of California, Los Angeles (UCLA), Los Angeles, California (asst. prof. 1997-2002, assoc. prof. 2002-2005, professor: 2005-)

Paid Scientific Associate, CERN – Particle Physics Experiments Division (CHORUS Experiment), Geneva, Switzerland, 1995 to 1997.

Selected Publications:

- ANITA-III Collab., “Constraints on the Diffuse High-Energy Neutrino Flux from the Third Flight of ANITA,” hep-ph/arXiv:1803.02719 (2018).
- ANITA-I Collab., “Characteristics of Four Upward-pointing Cosmic-ray-like Events Observed with ANITA,” Phys. Rev. Lett. **117**, 071101 (2016).
- T-510 Collab., “Accelerator Measurements of Magnetically-Induced Radio Emission from Particle Cascades with Applications to Cosmic-Ray Air Showers,” Phys. Rev. Lett. **116**, 141103 (2016).
- ANITA-I Collab., “Energy and Flux Measurements of Ultra-High Energy Cosmic

Rays Observed During the First ANITA Flight,” *Astropart. Phys.* **77**, 32 (2016).

- J. Avva, J. Kovac, C. Miki, D. Saltzberg, and A. Viereg, “An *in situ* Measurement of the Radio-Frequency Attenuation in Ice at Summit Station, Greenland,” *J. Glaciology* **61**, 1005 (2015).

- ANITA-II Collab., “First Limits on the Ultra-High Energy Neutrino Fluence from Gamma-Ray Bursts,” *Astrophysical J.* **736**, 50 (2011).

- T. Barrella, S. Barwick and D. Saltzberg, “Ross Ice Shelf (Antarctica) *in situ* Radio-Frequency Attenuation,” *J. of Glaciology* **57(201)**, 61 (2011).

- ANITA-I Collab., “Observation of Ultra-high-energy Cosmic Rays with the ANITA Balloon-borne Radio Interferometer,” *Phys. Rev. Lett.* **105**, 151101 (2010).

- ANITA-II Collab., “Observational Constraints on the Ultra-high Energy Cosmic Neutrino Flux from the Second Flight of the ANITA Experiment,” *Phys. Rev.* **D82**, 022004 (2010).

- ANITA-I Collab., “New Limits on the Ultra-high Energy Cosmic Neutrino Flux from the ANITA Experiment,” *Phys. Rev. Lett.* **103**, 051103 (2009).

- CDF Collab., “Search for the Flavor Changing Neutral Current Decay $t \rightarrow Zc$ in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV”, *Phys. Rev. Lett.* **101**, 192002 (2008).

- M. Griswold, M. Harrison and D. Saltzberg, “Observation of Light Transmission Through Randomly Rough Glass Surfaces beyond the Critical Angle”, *J. of the Optical Soc. of America* **24**, 3207 (2007).

- ANITA-Lite Collab., “Constraints on Cosmic Neutrino Fluxes from the ANITA Experiment,” *Phys. Rev. Lett.* **96**, 171101 (2006).

- CDF Collab., “Measurement of $B(t \rightarrow Wb)/B(t \rightarrow Wq)$ at the Collider Detector at Fermilab”, *Phys. Rev. Lett.* **95**, 102002 (2005).

- CDF Collab., “Inclusive Search for Anomalous Production of high- p_T Like-Sign Lepton Pairs in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, *Phys. Rev. Lett.* **93**, 061802 (2004).

- GLUE Collab., “An Experimental Limit on the Cosmic Diffuse Ultra-High Energy Neutrino Flux,” *Phys. Rev. Lett.* **93**, 041101 (2004).

- CDF Collab., “Measurement of the $t\bar{t}$ Production Cross Section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV Using Dilepton Events,” *Phys. Rev. Lett.* **93**, 142001 (2004).

- D. Goldstein and D. Saltzberg, “The RASNIK Real-Time Relative Alignment Monitor for the CDF Inner Tracking Detectors,” *Nucl. Instr. and Meth. A* **506**, 92 (2003).

- P. Gorham *et al.*, “Measurements of the Suitability of Large Rock Salt Formations for Radio Detection of High Energy Neutrinos,” *Nucl. Instr. and Meth. A* **490**, 476 (2002).

- D. Saltzberg, P. Gorham, D. Walz *et al.*, “Observation of the Askaryan Effect: Coherent Microwave Cherenkov Emission from Charge Asymmetry in High Energy Particle Cascades”, *Phys. Rev. Lett.* **86**, 2802 (2001).

- F. Halzen and D. Saltzberg, “Tau Neutrino Appearance with a 1000 Megaparsec Baseline,” *Phys. Rev. Lett.* **81**, 4305 (1998).

- CHORUS Collab., “A Search for $\nu_\mu \rightarrow \nu_\tau$ oscillation,” *Phys. Lett.* **B424**, 202 (1998).

- CDF Collab., “Measurement of the W Boson Mass,” *Phys. Rev. Lett.* **75**, 11 (1995); *Physical Review* **D52**, 4784 (1995).

- CDF Collab., “Observation of Top Quark Production in $p\bar{p}$ Collisions,” *Phys. Rev. Lett.* **74**, 2626 (1995).