DANIEL GORDON ANG

Gabrielse Lab
Department of Physics, Harvard University
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PROFESSIONAL EXPERIENCE

Graduate Student Researcher September 2015-present
ACME Collaboration, Harvard University Physics Department, Cambridge, MA

Senior Honors Researcher May 2014-May 2015
Hunter Lab, Amherst College Physics Department, Amherst, MA

Information Technology Supervisor/Specialist September 2011-May 2015
Amherst College IT Department, Amherst, MA

Visiting Undergraduate Fellow in Physics Summer 2013
ACME Collaboration, Harvard University Physics Department, Cambridge, MA

Summer Research Fellow June 2012-June 2013
Hunter Lab, Amherst College Physics Department, Amherst, MA

Physics Teaching Assistant and Grader January-December 2012
Amherst College Physics Department, Amherst, MA

EDUCATION

Doctor of Philosophy in Physics Expected 2021
Harvard University, Cambridge, MA
Adviser: Gerald Gabrielse

Master of Arts in Physics May 2017
Harvard University, Cambridge, MA

Bachelor of Arts *summa cum laude* with Distinction May 2015
Amherst College, Amherst, MA
Majors: Mathematics, Music, Physics
Senior honors theses in Music (*summa cum laude*) and Physics (*magna cum laude*)
Phi Beta Kappa, Sigma Xi

International Baccalaureate Diploma February 2011
Anglo-Chinese School (Independent), Singapore
43/45 points (97% percentile worldwide)
Music Extended Essay selected for official IBO publication *50 More Excellent Extended Essays*

PUBLICATIONS

Peer-reviewed:

3. S.K. Peck, N. Lane, **D.G. Ang** and L.R. Hunter, Using Tensor Light Shifts to Measure and Cancel a Cells Quadrupolar Frequency Shift," Physical Review A **93**, 023426 (2016).
2. L.R. Hunter, **D.G. Ang**, "Using Geoelectrons to Search for Velocity-Dependent Spin-Spin Interactions," Physical Review Letters **112**, 091803 (2014).

1. L.R. Hunter, J. Gordon, S. Peck, **D. Ang** and J.-F. Lin, "Using the Earth as a polarized electron source to search for long-range spin-spin interactions," Science **339**, 928 (2013).

Other:

2. L.R. Hunter, S.K. Peck, **D. Ang**, D.K. Kim, D. Stein, D. Orbaker, A. Foss, M.T. Hummon, J.E. Gordon, J.-F. Lin, "Bounds on LLI Violation and Long-Range Spin-Spin Interactions using Hg, Cs, and the Earth," CPT and Lorentz Symmetry - Proceedings of the Sixth Meeting. Edited by Alan Kostelecky. World Scientific Publishing Co. Pte. Ltd., 2014, pp. 1-4
1. **D.G. Ang**, "Shape and Size Matter for Projectile Drag," Journal of the Advanced Undergraduate Physics Laboratory Investigation: Vol. 1: Iss. 1, Article 2 (2013).

HONORS AND AWARDS

- Rufus B. Kellogg Amherst Graduate Fellowship, $90,000 (2015-2018)
- Joint Quantum Institute Graduate Fellowship, University of Maryland (declined)
- Stifler Prize in physics, Amherst College (2015)
- Sundquist Prize in music composition and performance, Amherst College (2015)
- Winner, Third Degree (National category) and Honorary Mention (International category), Golden Key Festival Piano Composition Competition, Vienna, Austria (2014)
- Finalist in ASCAP Morton Gould Young Composers Awards (2014)
- Research on long-range spin-spin interactions was featured in Boston Globe, Physics World, Popular Science, and Science Daily, among others (2014)
- Schupf Scholarship (2012-2015): $25,000 for independent research and projects
- Bassett Prize in physics, Amherst College (2012)
- Amherst College International Student Scholarship (2011-2015)
- Singapore Ministry of Education School-Based Scholarship (2007-2010)

Media articles

- "When One–or Two–Isn't Enough: Triple Majors Balance Academics, Ambition and Time", Elaine Jeon, Amherst College News, July 2015.
- "One-Man Orchestra Composes His Own Path", Jingwen Zhang, Amherst *Student*, May 2015.
- "Playing Where Brahms Once Played", William Sweet, *Amherst* magazine, August 2014.

TECHNICAL SKILLS

- Programming: MATLAB, Mathematica, COMSOL, R, Java
- Experiment Control and Data Acquisition: LabView
- Computer-Aided Design: Autodesk Inventor, SolidWorks
- Musical software: Sibelius, Finale, Ableton Live

LANGUAGES

English, Indonesian, Malay (fluent), German, Ancient Greek (basic).

ORGANIZATIONS

- American Physical Society (2011-present)
- Society of Physics Students (2011-present)

EXTRACURRICULAR ACTIVITIES

- Dudley Fellow and Music Director, Dudley World Music Ensemble (2016-present)
- Musician, Dudley World Music Ensemble (2015-present)
- Cellist, Mather Chamber Music Program (2015-16, 2017)
- Cellist, Five College Early Music Program (2015)
- Cellist, Amherst College Jazz Combo Program (2013-2015)
- Cellist, Harvard-Radcliffe MIHNUET program (summer 2013)
- Cellist and pianist, First Baptist Church of Amherst (2011-2015)
- Cellist, Buckley Boys String Quartet, Amherst College Chamber Music Program (2011-2015)
- Principal Cellist, Amherst College Symphony Orchestra (2011-2015)