Philip Andrew White

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Education

- Doctor of Philosophy: Statistical Science; Duke University; 2019
  - Dissertation: Topics in Bayesian Spatiotemporal Prediction of Environmental Exposure
  - Committee: Alan Gelfand (chair), Fan Li (co-chair), Colin Rundel, and Ben Goldstein
- Master of Science: Statistics; Brigham Young University; 2015
  - Thesis: Bayesian Gaussian Process Model for Antarctic Surface Mass Balance and Proposing New Field Measurements
  - Committee: C. Shane Reese (chair), William F. Christensen, and Shannon Tass
- Bachelor of Science: Applied Physics; Brigham Young University; 2014
  - Graduated *Magna Cum Laude*; speaker at college graduation
  - Senior Thesis: Bayesian Model for Antarctic Surface Mass Balance
  - Minors: Mathematics, Scandinavian Studies

Professional Experience

- Assistant Professor; Brigham Young University; 2019 – Current
- Research Assistant; Duke University; 2015 – 2019
- Data Science Intern: Disease Risk Modeling; The Climate Corporation; 2018
- Statistics Research Assistant; Brigham Young University; 2013 – 2015
- Physics Research Assistant; Brigham Young University; 2011 – 2013

Peer-Reviewed Publications

- **P. White**, C.S. Reese, W. Christensen, and S. Rupper (2019+), "A Model for Antarctic Surface Mass Balance and Ice Core Site Selection," *Environmetrics*. link.
- **P. White** and E. Porcu (2019+), "Nonseparable Covariance Models on Circles Cross Time: A Study of Mexico City Ozone," *Environmetrics* link
- **P. White**, A. Gelfand, E. Rodrigues, and G. Tzintzun (2019), "Pollution State Modeling for Mexico City," *Journal of the Royal Statistical Society - Series A*, Volume 182, Issue 3, 1039-1060. link.
- **P. White**, C. Berrett, S. Tass, and M. Findlay (2018+), "Modeling Efficiency of Foreign Aid Allocation in Malawi," *The American Statistician*. link
- **P. White**, A. Gelfand, and T. Utlaut (2017), "Prediction and model comparison for areal unit data," *Spatial Statistics*, Volume 22, Part 1, 89-106. link
- J. S. Colton, D. Meyer, K. Clark, D. Craft, J. Cutler, T. Park, and **P. White** (2012), "Long-Lived electron spins in a modulation doped (100) GaAs quantum well," *Journal of Applied Physics*, Volume 112, Issue 8. link

Under Review

- **P. White** and E. Porcu, "Towards a Complete Picture of Covariance Functions on Spheres Cross Time." link
- **P. White** and A. Gelfand, "Multivariate Functional Data Modeling with Time-varying Clustering." link
- M. Gruen, **P. White**, and B. Hare, "Do veterinarians or the public believe dog breed differ in pain sensitivity."

Working Papers

· **P. White**, D. Keeler, and S. Rupper, "Spatial Interpolation of Curves with Monotonicity Constraints: An Analysis of Antarctic Snow Density." Expected Submission: 2019.
· **P. White** and A. Gelfand, "Model Comparison and Validation for Bayesian Hawkes Process Models." Expected Submission: 2019.
· **P. White**, A. Gelfand, and F. Li, "Bayesian Modeling for Generalized Evolutionary Point Processes." Expected Submission: 2019.

Other Publications

· P. White (2015), "Bayesian Gaussian Process Model for Antarctic Accumulation and Proposing New Field Measurement," Masters Project, Brigham Young University.
· P. White (2014), "ORCA final report," *2014 Journal of Undergraduate Research* [Online], Brigham Young University.
· P. White (2014), "Quantifying Climate Change: Bayesian Model for Antarctic Surface Mass Balance," Senior Thesis, Brigham Young University.

Posters and Presentations

· "Multivariate Functional Data Modeling with Time-varying Clustering"
  – New England Statistics Symposium (2019)
  – Joint Statistical Meetings (2019)
· "Pollution State Modeling for Mexico City"
  – ASA ENVR Workshop - Statistics for the Environment: Research, Practice and Policy (2018)
· "Nonseparable Covariance Models on Circles Cross Time: A Study of Mexico City Ozone"
  – Duke Department of Statistical Science 701 Seminar Series (2018)
  – International Conference on Advances in Interdisciplinary Statistics and Combinatorics (AISC) (2018)
  – Brigham Young University (2018)
  – RAND (2018)
  – Los Alamos National Labs (2018)
· "Prediction and Model Comparison for Areal Unit Data"
  – Duke Department of Statistical Science 701 Seminar Series (2018)
  – Society of Duke Fellows (2017)
· "Gaussian Process Model for Antarctic Surface Mass Balance and Ice Core Site Selection,"
  – American Geophysical Union (2017), New Orleans, LA.
  – Brigham Young University Student Research Conference (2015), Provo, UT.
  – Conference on Data Analysis (2014), Poster, Santa Fe, NM.
  – Brigham Young University Student Research Conference (2014), Provo, UT.
· "Studies of electron spin in GaAs quantum dots,"
  – American Physical Society Meetings (2013), Baltimore, MD.
· "Photoluminescence Decays in Cadmium Telluride,"
  – Brigham Young University Student Research Conference (2013), Provo, UT.

Courses Taught

- Professor
  · Brigham Young University
    - Statistics 641: Fall 2019
    - Swedish 201: Winter 2012
    - Swedish 202: Fall 2011, Fall 2012

- Duke University
  - Statistics 111 (Probability and Statistics): Summer 2017 (Term I)
- Teaching Assistant
  - Duke University
    - Statistics 944 (Spatial Statistics): Fall 2018
    - Statistics 444/644 (Spatio-temporal Modeling): Spring 2018, Fall 2018
    - Statistics 532 (Theory of Inference): Fall 2017
    - Statistics 111 (Probability and Statistics): Spring 2017

Awards

- Duke University
  - James B. Duke Fellowship Recipient, Duke University, 2015-2019
  - ENVR Workshop - Statistics for the Environment: Research, Practice and Policy, Student travel award, 2018
  - Department of Statistical Science TA of the Year, 2018
  - Statistical Science First Year Fellowship, Duke University, 2015-2016
- Brigham Young University (Masters)
  - Brigham Young University Student Research Conference Session Winner, 2014 and 2015
  - Conference on Data Analysis Student Travel Award, 2014
  - Office of Research and Creative Activities Grant, Brigham Young University, 2014
  - Statistics Department scholarship (masters), 2014-2015
  - Outstanding Performance within the Second Year of Graduate School, Department of Statistics, Brigham Young University, 2015
- Brigham Young University (Undergrad)
  - C. Bryant Copley Scholarship, Brigham Young University Physics Department, 2013-2014
  - Dean's List, Brigham Young University, College of Life Sciences Dean's List (2008, 2010-2011); College of Physical and Mathematical Sciences Dean's List (2011-2014)
  - Distinguished Math Performance, Brigham Young University Department of Mathematics, 2011 and 2012
  - Brigham Young University full-tuition scholarship, 2007-2008; 2010-2013
  - Brian Watkins Scholarship, 2007: for excellent high school student athletes

Service

- Peer Review For:
  - 2019: Environmetrics; Journal of Agricultural, Biological and Environmental Statistics
  - 2018: Environmetrics

Memberships

- American Statistical Association: 2014-Present
- International Society for Bayesian Analysis: 2017-Present
- American Geophysical Union: 2017-Present