

Ethan Berger Anderes

Curriculum Vitae as of October 2015

Department of Statistics

University of California at Davis

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Education

Ph.D. in Statistics, University of Chicago 2005

Thesis: *Estimating Deformations of Gaussian Random Fields.*

Adviser: *Michael L. Stein.*

Bachelor of Arts in Mathematics, University of Minnesota 2000

Bachelor of Arts in Philosophy, University of Minnesota 2000

Professional Experience

Associate Professor, Department of Statistics 2014-present
University of California at Davis

Assistant Professor, Department of Statistics 2008-2014
University of California at Davis

Visiting Assistant Professor, Department of Statistics 2006-2008
University of California at Berkeley

NSF Mathematical Sciences Postdoctoral Fellowship 2005-2008
University of California at Berkeley

Research and Software Development Summer 2007
Jet Propulsion Laboratory, NASA

Publications and Technical Reports

- [1] Anderes, E and Stein, M. (2008): Estimating deformations of isotropic gaussian random fields on the plane. *The Annals of Statistics* **36**, 719-741.
- [2] Anderes, E. and Chatterjee, S. (2009): Consistent estimates of deformed isotropic gaussian random fields on the plane. *The Annals of Statistics* **37**, 2324-2350.
- [3] Anderes, E., Yu, B., Jovanovic, V., Moroney, C., Garay, M., Braverman, A., Clothiaux E. (2009): Maximum likelihood estimation of cloud height from multi-angle satellite imagery. *Annals of Applied Statistics* **3**, 902-921.
- [4] Anderes, E. (2010): On the consistent separation of scale and variance for gaussian random fields. *The Annals of Statistics* **38**, 870-893.

- [5] Anderes, E. and Coram, M. (2011): Two dimensional density estimation using smooth invertible transformations. *Journal of Statistical Planning and Inference* **141**, 1183-1193.
- [6] Anderes, E., Knox, L., van Engelen, A. (2011): Mapping gravitational lensing of the CMB using local likelihoods. *Physical Review D* **83**, 043523.
- [7] Anderes, E. and Stein, M. (2011): Local likelihood estimation for nonstationary random fields. *Journal of Multivariate Analysis* **102**, 506-520.
- [8] Anderes, E. (2012a): Robust Adaptive Wiener Filtering. Refereed paper for *IEEE International conference on image processing*.
- [9] Anderes, E. (2012b): Kriging. *Encyclopedia of Environmetrics ed2*, Wiley.
- [10] Anderes, E. and Coram, M. (2012): A general spline representation for nonparametric and semiparametric density estimates using diffeomorphisms. arXiv:1205.5314.
- [11] Anderes, E., Huser, R., Nychka, D., Coram, M. (2012): Nonstationary positive definite tapering on the plane. To appear in the *Journal of Computational and Graphical Statistics*.
- [12] Anderes, E. and Paul, D. (2012): Shrinking the quadratic estimator of weak lensing. *Physical Review D* **85**, 103003.
- [13] Anderes, E. and van Engelen, A. (2012): *Statistical Challenges in Modern Astronomy V*, Springer-Verlag, New York.
- [14] Anderes, E. (2013): Decomposing CMB lensing power with simulation. *Physical Review D* **88**, 083517
- [15] Anderes, E., Wandelt, B., Lavaux, G. (2015): Bayesian inference of CMB gravitational lensing. *The Astrophysical Journal*, **808**, 152

Grants

NSF CAREER grant DMS-1252795 *2013-present*
 Title: *Deformations in statistics, cosmology and image analysis.*

NSF grant DMS-1007480 *2009-present*
 Title: *Local Likelihood Estimation for Nonstationary Random Fields.*

NSF Mathematical Sciences Postdoctoral Fellowship *2005-2008*
University of California at Berkeley

Professional Service

Treasurer *2015*
Nonparametric Section of the American Statistical Association

Associate Editor *2013 - 2014*
The American Statistician

President Sacramento branch of the ASA	<i>2011</i>
Vice President Sacramento branch of the ASA	<i>2010</i>
Co-organizer Workshop on Statistical Methods for Astronomy and Astrophysics, UC Davis	<i>2011</i>
Member Universe at UCDavis Initiative	<i>2008 - present</i>

Invited Lectures

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| [1] Invited presentation, Computing the Universe workshop, Berkeley, CA. | <i>2015</i> |
| [2] Invited presentation, IMS Asia Pacific Rim Meeting, Taipei, Taiwan. | <i>2014</i> |
| [3] Invited presentation, Carnegie Mellon University, Pittsburgh, PA. | <i>2014</i> |
| [4] Invited presentation, Joint Statistical Meeting, Boston, MA. | <i>2014</i> |
| [5] Invited presentation, ICSA International Conference, Hong Kong, China. | <i>2013</i> |
| [6] Invited presentation, BIRS CosmoStat13 workshop, Banff, Canada. | <i>2013</i> |
| [7] Invited seminar, Columbia University, NY. | <i>2013</i> |
| [8] Invited seminar, University of Michigan, Ann Arbor, MI. | <i>2013</i> |
| [9] Invited seminar, Stanford University. | <i>2012</i> |
| [10] Invited presentation, Workshop on Computer Science and Statistics of Contemporary CMB data analysis, Paris, France. | <i>2012</i> |
| [11] Topic contributed paper and talk, Joint Statistical Meeting, San Diego, CA. | <i>2012</i> |
| [12] IMS invited session, IMS Asia Pacific Rim meeting, Tsukuba, Japan. | <i>2012</i> |
| [13] IMS invited session WNAR Annual Meeting, Fort Collins, Colorado. | <i>2012</i> |
| [14] Invited seminar, Center for Time Domain Informatics, University of California at Berkeley. | <i>2012</i> |
| [15] Invited seminar, University of Rome, Tor Vergata, IT. | <i>2012</i> |
| [16] Invited presentation, Workshop on Statistical Methods for Astronomy and Astrophysics, UC Davis. | <i>2011</i> |
| [17] Invited presentation, Conference on Statistical Challenges in Modern Cosmology V, Penn State. | <i>2011</i> |
| [18] Invited seminar, University of California at Davis. | <i>2011</i> |

- [19] Topic contributed paper and talk, Joint Statistical Meeting, Vancouver, BC. *2010*
- [20] Invited presentation, Interface Conference, Seattle. *2010*
- [21] Invited presentation, Conference on the Frontiers of Statistical Decision Making and Bayesian Analysis in Honor of James O. Berger, San Antonio. *2010*
- [22] Invited new-researcher presentation, SAMSI conference, Space-time Analysis for Environmental Mapping, Epidemiology and Climate Change. SAMSI. *2009*
- [23] Invited presentation, Oberwolfach conference, Challenges in Statistical Theory: Complex Data Structures and Algorithmic Optimization, Germany. *2009*
- [24] Invited seminar, University of California at Riverside. *2009*
- [25] Invited presentation, Stanford Institute for Theoretical Economics. *2008*
- [26] Invited presentation, International Biometric Society, ENAR, Arlington. *2008*
- [27] Invited presentation, Data Users Science Symposium, Caltech, Pasadena. *2006*
- [28] Invited presentation, International Biometric Society, ENAR meeting, Tampa. *2006*