Ethan Anderes | Curriculum Vitae

Associate Professor – Department of Statistics – University of California at Davis

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Employment

Associate Professor	**University of California at Davis**
Department of Statistics	*2014–present*
Assistant Professor	**University of California at Davis**
Department of Statistics	*2008–2014*
Visiting Assistant Professor	**University of California at Berkeley**
Department of Statistics	*2006–2008*
NSF Mathematical Sciences Postdoctoral Fellow	**University of California at Berkeley**
Department of Statistics	*2005–2008*
Research and Software Development	**NASA**
Jet Propulsion Laboratory	*Summer 2007*

Education

PhD in Statistics	**University of Chicago**
Adviser: Michael L. Stein	*2005*
Bachelor of Arts	**University of Minnesota**
Double major in Mathematics and Philosophy	*2000*

Research

10 Selected Publications and Preprints

Isotropic covariance functions on graphs and their edges
Anderes, Møller and Rasmussen, http://arxiv.org/abs/1710.01295 — 2017

Bayesian delensing of CMB temperature and polarization
Millea, Anderes and Wandelt, http://arxiv.org/abs/1708.06753 — 2017

Approximate Likelihood Approaches for Detecting the Influence of Primordial Gravitational Waves in CMB Polarization
Pan, Anderes and Knox, http://arxiv.org/abs/1709.00102 — 2017

A generalized quadratic estimate for random field nonstationarity
Anderes and Guinness, http://arxiv.org/abs/1603.03496 — 2016

Discrete Wasserstein Barycenters: Optimal transport for discrete data
Anderes, Borgwardt and Miller, Mathematical Methods of Operations Research 84, 389–409 — 2016

Bayesian inference of CMB gravitational lensing
Anderes, Wandelt and Lavaux, The Astrophysical Journal 808, 152 — 2015

Decomposing CMB lensing power with simulation
Anderes, Physical Review D 88, 083517   *2013*

On the consistent separation of scale and variance for Gaussian random fields
Anderes, The Annals of Statistics 38, 870-893   *2010*

Consistent estimates of deformed isotropic Gaussian random fields on the plane
Anderes and Chatterjee, The Annals of Statistics 37, 2324-2350   *2009*

Estimating deformations of isotropic Gaussian random fields on the plane
Anderes and Stein, The Annals of Statistics 36, 719-741   *2008*

Other Publications and Preprints

Tuning Goodness-of-Fit Tests
Arrasmith, Follin, Anderes and Knox, $http://arxiv.org/abs/1705.03565$ *2017*

A general spline representation for nonparametric and semiparametric density estimates using diffeomorphisms
Anderes and Coram, $http://arxiv.org/abs/1205.5314$ *2012*

Shrinking the quadratic estimator of weak lensing
Anderes and Paul, Physical Review D 85, 103003   *2012*

Nonstationary positive definite tapering on the plane
Anderes, Huser, Nychka and Coram, JCGS 22, 4, 848-865   *2012*

Robust Adaptive Wiener Filtering
Anderes, IEEE International conference on image processing   *2012*

The matter spectral density from lensed CMB observations
Anderes and van Engelen, Statistical Challenges in Modern Astronomy V, Springer-Verlag, NY   *2012*

Kriging
Anderes, Encyclopedia of Environmetrics ed2, Wiley   *2012*

Mapping gravitational lensing of the CMB using local likelihoods
Anderes, Knox, and van Engelen , Physical Review D 83, 043523   *2011*

Two dimensional density estimation using smooth invertible transformations
Anderes and Coram, Journal of Statistical Planning and Inference, 141: 1183–1193   *2011*

Local likelihood estimation for nonstationary random fields
Anderes and Stein, Journal of Multivariate Analysis 102, 506-520   *2011*

Estimating Cloud Height from Multi-Angle Satellite Imagery
Anderes, et al, The Annals of Applied Statistics 3, 902-921   *2009*

Grants and Awards

Chancellor's Fellowship Award, University of California at Davis
Official distinction for 5 years along with a $25,000 prize — *2015-2020*

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

NSF grant DMS-1007480
Title: Local Likelihood Estimation for Nonstationary Random Fields — *2009-2014*

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

Professional Activities

Treasurer
Nonparametric Section of the American Statistical Association — *2015*

NSF panel reviewer
Division of Mathematical Sciences — *2015*

Co-organizer: UC Davis Statistical Sciences Symposium
Spatial–Temporal Statistics: Methods and Applications — *2014*

Associate Editor
The American Statistician — *2013–2014*

President
Sacramento branch of the ASA — *2011*

Vice President
Sacramento branch of the ASA — *2010*

Co-organizer: UC Davis Statistical Sciences Symposium
Statistical Methods for Astronomy and Astrophysics — *2014*

Member
Universe at UCDavis Initiative — *2008–present*

Technical skills

- **Programming Languages:** Advanced: Julia, LaTeX. Basic: Python, OpenCl, Matlab.