

NICOLAI MEINSHAUSEN

Department of Statistics
University of Oxford

meinshausen@stats.ox.ac.uk

APPOINTMENTS

Automat Ltd., Getco LLC, Head of Research 2011 -
University of Oxford, University Lecturer 2007 - [currently on leave]
Somerville College, Oxford, Tutorial Fellow 2007 - [currently on leave]

EDUCATION

Post-doctoral fellow
University of California, Berkeley, Department of Statistics
Sponsors: Bin Yu & John Rice 2006 - 2007
Doktor Mathematik
ETH Zurich, Department of Mathematics, Seminar für Statistik
Advisors: Peter Bühlmann & Hans-Ruedi Künsch 2002 - 2005
MSc in Applied and Computational Mathematics
University of Oxford, Department of Mathematics 2001 - 2002
Diplom in Physik
ETH Zurich, Department of Physics 1996 - 2001

AWARDS

Guy Medal in Bronze of the Royal Statistical Society July 2011
Leverhulme Prize
5 UK prizes for Mathematics awarded every second year November 2010
Teaching Award
Department of Statistics, Oxford June 2010
Silver medal of ETH Zurich for best PhD thesis
in the Department of Mathematics March 2006
Distinction for MSc in Applied and Computational Mathematics,
University of Oxford August 2002
Willi-Studer prize and distinction for best diploma in physics, ETH Zurich June 2001

SCHOLARSHIPS

Scholarship of the German Science Foundation
for post-doctoral studies at UC Berkeley March 2006
Scholarship of the German National Merit Foundation June 1998

SYNERGISTIC ACTIVITIES

Associate Editor:
Journal of Computational and Graphical Statistics 2008 -
Journal of the Royal Statistical Society, Series B 2009 - 2011
Biometrika 2009 - 2011
Electronic Journal of Statistics 2006 - 2010

Referee:

Annals of Statistics, Annals of Applied Statistics, Bernoulli, Biometrics, Biometrika, Journal of the Royal Statistical Society, Series B, Journal of Computational and Graphical Statistics, Journal of Machine Learning Research, Journal of the American Statistical Association, John Wiley books, Journal of Multivariate Analysis, Probability Theory & Related Fields, Statistica Sinica, Statistical Applications in Genetics and Molecular Biology, Scandinavian Journal of Statistics, Springer books, Statistical Science

GRANTS

Leverhulme Prize (Principal Investigator)

EPSRC grant *Change in the Atlantic Atmosphere Ocean System: ChAAOS* (Co-Investigator)

EPSRC grant *End-to-end Quantification of Uncertainty for Impacts Prediction (EQUIP)* (Co-investigator)

THESES ADVISEES

Currently advising 2 PhD students (Chris Choy & Zhou Fang),

co-advising 2 PhD students (Dan Rowlands, joint with the Climate Dynamics group and Emmouela Repapi, joint with Ludwig Institute for Cancer Research)

Member of examination committee for 2 Phd students (Amber Thomas & Anneleen Verhasselt)

PUBLICATIONS

1. Daniel Rowlands, David Frame, Duncan Ackerley, Tolu Aina, Ben Booth, Carl Christensen, Matthew Collins, Nicholas Faull, Chris Forest, Benjamin Grandey, Edward Gyspeerd, Eleanor Highwood, William Ingram, Sylvia Knight, Ana Lopez, Neil Massey, Frances McNamara, Nicolai Meinshausen, Claudio Piani, Suzanne Rosier, Benjamin Sanderson, Leonard Smith, Daith Stone, Milo Thurston, Kuniko Yamazaki, Hiro Yamazaki and Myles Allen (2012)
Uncertainty in 21st century warming constrained by recent climate observations
to appear in **Nature Geoscience**
2. Steffen Lauritzen and Nicolai Meinshausen (2012)
Discussion of "Latent Variable Graphical Model Selection Via Convex Optimization"
to appear in **Annals of Statistics**
3. Nicolai Meinshausen, Marloes Maathuis and Peter Buehlmann (2011)
Optimality of the Westfall-Young permutation procedure for multiple testing under dependence
to appear in **Annals of Statistics**
4. Nicolai Meinshausen (2011)
Discussion of Multiple Testing for Exploratory Research
to appear in **Statistical Science**
5. Zhou Fang and Nicolai Meinshausen (2011)
Liso Isotone for High-Dimensional Additive Isotonic Regression
to appear in **Journal of Computational and Graphical Statistics**

6. Nicolai Meinshausen (2011)
Partition Maps
Journal of Computational and Graphical Statistics, 20, 1007-1028
7. Nicolai Meinshausen (2010)
Node Harvest
Annals of Applied Statistics, 4, 2049-2072
8. Nicolai Meinshausen and Peter Bühlmann (2010)
Stability Selection (with discussion)
Journal of the Royal Statistical Society, Series B, 72, 417-473
9. Nicolai Meinshausen, Lukas Meier and Peter Bühlmann (2009)
P-values for high-dimensional regression
Journal of the American Statistical Association, 104, 1671-1681
10. Nicolai Meinshausen (2009)
Forest Garrote
Electronic Journal of Statistics, 3, 1288-1304
11. Myles Allen, David Frame, Chris Huntingford, Chris Jones, Jason Lowe, Malte Meinshausen and Nicolai Meinshausen (2009)
Warming caused by cumulative carbon emissions towards the trillionth tonne
Nature, 458, 1163-1166
12. Malte Meinshausen, Nicolai Meinshausen, William Hare, Sarah Raper, Katja Frieler, Reto Knutti, David Frame and Myles (2009)
Greenhouse-gas emission targets for limiting global warming to 2 C
Nature, 458, 1158-1162
13. Nicolai Meinshausen, Peter Bickel and John Rice (2009)
Efficient Blind Search: Optimal Power of Detection under Computational Cost Constraints
Annals of Applied Statistics, 3, 38-60
14. Nicolai Meinshausen and Bin Yu (2009)
Lasso-type recovery of sparse representations for high-dimensional data
Annals of Statistics, 37, 246-270
15. Nicolai Meinshausen and Peter Bühlmann (2008)
Discussion of Treelets – An Adaptive Multi-Scale Basis for Sparse Unordered Data
Annals of Applied Statistics, 2, 478-481
16. Nicolai Meinshausen (2008)
Hierarchical testing of variable importance
Biometrika, 95, 265-278
17. Nicolai Meinshausen (2008)
A Note on the Lasso for Graphical Gaussian Model Selection
Statistics & Probability Letters, 78, 880-884
18. Nicolai Meinshausen, Guilherme Rocha and Bin Yu (2007)
Discussion: A tale of three cousins: Lasso, L2Boosting and Dantzig
Annals of Statistics, 35, 2373-2384
19. Nicolai Meinshausen (2007)
Relaxed Lasso
Computational Statistics and Data Analysis, 52, 374-393

20. Nicolai Meinshausen (2006)
Quantile Regression Forests
Journal of Machine Learning Research, 7, 983-999, 2006
21. Nicolai Meinshausen and Peter Bühlmann (2006)
High dimensional graphs and variable selection with the Lasso
Annals of Statistics, 34, 1436-1462
22. Nicolai Meinshausen (2006)
False discovery control for multiple tests of association under general dependence
Scandinavian Journal of Statistics, 33, 227-237
23. Nicolai Meinshausen and John Rice (2006)
Estimating the proportion of false null hypotheses among a large number of independently tested hypotheses
Annals of Statistics, 34, 373-393
24. W. Chen, C. Alcock, T. Axelrod, F. Bianco, Y. Byun, Y. Chang, K. Cook, R. Dave, J. Giammarco, D. Kim, S. King, T. Lee, M. Lehner, C. Lin, H. Lin, J. Lissauer, S. Marshall, N. Meinshausen, S. Mondal, I. De Pater, R. Porrata, J. Rice, M. Schwamb, A. Wang, S. Wang, C. Wen, Z. Zhang (2006)
Search for small trans-Neptunian objects by the TAOS project
Proceedings of the International Astronomical Union, Cambridge University Press, 2, 65-68
25. Nicolai Meinshausen (2005)
Lower bounds for the number of false null hypotheses for multiple testing of associations
Biometrika, 92, 893-907
26. Nicolai Meinshausen and Ben Hambly (2004)
Monte carlo methods for the valuation of multiple exercise options
Mathematical Finance, 14, 557-583

No. 12 and 21 were selected as *Hot New Papers* in the fields of Geosciences and Mathematics respectively by ISI Thompson.