Curriculum Vitae

Personal Data

Name: Bühlmann, Peter Lukas.

Born: April 12, 1965 in Zürich, Switzerland.

Citizenship: Switzerland.

Family status: Married, four children.

Education

1990–1993: PhD studies at ETH Zürich, Switzerland.

1985–1990: Studies in mathematics at ETH Zürich, Switzerland.

Positions

2013–2017: Chair of the Department of Mathematics, ETH Zürich, Switzerland.

2004–present: Full Professor, Department of Mathematics, ETH Zürich, Switzerland.

2001–2004: Associate Professor, Department of Mathematics, ETH Zürich, Switzerland.

1997–2001: Assistant Professor, Department of Mathematics, ETH Zürich, Switzerland.

1995–1997: Neyman Assistant Professor, Department of Statistics, University of California, Berkeley.

1994–1995: Postdoctoral Research Fellow at University of California, Berkeley. Supported by the Swiss National Science Foundation.

Affiliations

2020–current: Member Steering Committee for ETH AI Center (ETH Zürich).

2019–current: Director of ETH Foundations of Data Science (ETH Zürich).

2014–current: Member of Competence Center for Personalized Medicine (University of Zürich and ETH Zürich).

2012–current: Founding member of the Max Planck ETH Center for Learning Systems.

2005–2013: Group Leader in Competence Center for Systems Physiology and Metabolic Diseases (ETH Zürich and University of Zürich).

Awards and Honours

2022: President of the Institute of Mathematical Statistics (IMS).

2022: Elected member of the German National Academy of Sciences Leopoldina.

2021: Al-Kindi Lectures 2021. King Abdullah University of Science and Technology.

2021: Plenary speaker at the 8th European Congress of Mathematics. Portoroz, Slovenia (virtual).

2020: Highly Cited Researcher 2020 (in mathematics) by Clarivate Analytics. https://recognition.webofscience.com/awards/highly-cited/2020/.

2019: Highly Cited Researcher 2019 (in mathematics) by Clarivate Analytics. https://recognition.webofsciencegroup.com/awards/highly-cited/2019/.

2019: Invited semi-plenary speaker at the International Congress on

Industrial and Applied Mathematics 2019. Valencia.

2019: Challis Lectures. University of Florida (Gainesville).

2018: Highly Cited Researcher 2018 (in mathematics) by Clarivate Analytics. See `https://clarivate.com/hcr/`.

2018: Hartigan Lecture. Yale University.

2018: Guy Medal in Silver from the Royal Statistical Society.

2018: Invited speaker at the International Congress of Mathematicians 2018. Rio de Janeiro.

2018: Neyman Lecturer. Annual Meeting of the Institute of Mathematical Statistics & 12th Intern. Vilnius Conference. Vilnius.

2018: Rothschild Distinguished Visiting Fellow and Lecturer. Isaac Newton Institute. Cambridge.

2018: ERC Advanced Grant from European Research Council.

2017: Highly Cited Researcher 2017 (in mathematics and in computer science) by Clarivate Analytics. See `https://clarivate.com/hcr/`.

2017: Miller Visiting Professor, UC Berkeley.

2017: Doctor Honoris Causa. Université Catholique de Louvain.

2016: James Francis Hannan Visiting Scholar. Michigan State University.

2016: Highly Cited Researcher 2016 (in mathematics) by Clarivate Analytics. See `https://clarivate.com/hcr/`.

2016: Fellow of the American Statistical Association.

2016: IAS Senior Scholar-in-Residence 2016, Institute for Advanced Studies/Park City Mathematics Institute.

2016: Read paper to the Royal Statistical Society, London ('Causal inference using invariant prediction: identification and confidence intervals'). Joint with J. Peters and N. Meinshausen.

2015: Highly Cited Researcher 2015 (in mathematics) by Thomson Reuters. See `http://highlycited.com/'`.

2015: Forum Lectures, European Meeting of Statisticians 2015, Amsterdam.

2014: Highly Cited Researcher 2014 (in mathematics) by Thomson Reuters. See `http://highlycited.com/`.

2014: Distinguished Lecturer at the Chinese Academy of Sciences, Beijing.

2013: Winton Research Prize, London.

2012: Golden Tricycle Award (for most family-friendly supervisor), ETH Zürich.

2012: 14th Bahadur Memorial Lecture, University of Chicago.

2012: 5th Woodroofe Lecture, University of Michigan, Ann Arbor.

2011: 5th Pao-Lu Hsu Lecture, sponsored by Peking University and Microsoft Research Asia. Peking.

2010: Read paper to the Royal Statistical Society, London ('Stability Selection'). Joint with N. Meinshausen.

2010–2012: Co-Editor of the Annals of Statistics.

2009: Medallion Lecture, sponsored by the Institute of Mathematical Statistics; Joint Statistical Meetings, Washington.

2006: Fellow of the Institute of Mathematical Statistics (IMS).

1993: Award for Excellent Young Scientists from ETH Zürich.

1990: Pólya Prize: Best 'diploma' in mathematics from ETH Zürich.

Research interests
Statistics, Machine Learning, Computational Biology
(ranging from methodology and mathematical theory to interdisciplinary
research in biology and bio-medicine)

PhD students (main advisor)
1. 2002: Fiorenzo Ferrari, ETH Zürich.
2. 2002: Francesco Audrino, ETH Zürich.
3. 2004: Marcel Dettling, ETH Zürich.
4. 2006: Roman Lutz, ETH Zürich.
5. 2006: Nicolai Meinshausen, ETH Zürich.
6. 2008: Markus Kalisch, ETH Zürich.
7. 2008: Lukas Meier, ETH Zürich.
8. 2009: Corinne Dahinden, ETH Zürich.
9. 2010: Nicolas Städler, ETH Zürich.
10. 2011: Jürg Schelldorfer, ETH Zürich.
11. 2012: Bernd Fellinghauer, ETH Zürich.
12. 2012: Daniel Stekhoven, ETH Zürich.
13. 2012: Philipp Rütimann, ETH Zürich.
14. 2012: Sarah Gerster, ETH Zürich.
15. 2012: Jonas Peters, ETH Zürich.
16. 2013: Manuel Koller, ETH Zürich.
17. 2013: Alain Hauser, ETH Zürich.
18. 2015: Jacopo Mandozzi, ETH Zürich.
19. 2015: Christopher Nowzohour, ETH Zürich.
20. 2015: Anna Drewek, ETH Zürich.
21. 2016: Chenchen Zhu, ETH Zürich and EMBL Heidelberg.
22. 2016: Ruben Dezeure, ETH Zürich.
23. 2016: Jan Ernest, ETH Zürich.
24. 2016: Laura Buzdugan, ETH Zürich.
25. 2017: Sylvain Robert, ETH Zürich.
26. 2018: Shu Li, ETH Zürich.
27. 2019: Britta Velten, ETH Zürich and EMBL Heidelberg.
28. 2019: Niklas Pfister, ETH Zürich.
29. 2021: Solt Kovács, ETH Zürich.
30. 2021: Claude Renaux. ETH Zürich.
31. 2021: Domagoj Ćevid. ETH Zürich.
32. 2021: Nicolas Bennett, ETH Zürich.
33. 2022: An-phi Nguyen, ETH Zürich and IBM Rüschlikon.
34. ongoing: Corinne Emmenegger. ETH Zürich.
35. ongoing: Christoph Schultheiss, ETH Zürich.
36. ongoing: Juan Gamella, ETH Zürich.
37. ongoing: Malte Londschien, ETH Zürich.
38. ongoing: Cyrill Scheidegger, ETH Zürich.
39. ongoing: Michael Zellinger, Caltech and ETH Zürich.

Supervision of postdoctoral researchers
1. 2002–2005: Anja Wille
2. 2006–2009: Juliane Schäfer
3. 2008–2011: Nicole Bruni
4. 2012: Caroline Uhler
5. 2013–2014: Ewa Szczurek (joint with Niko Beerenwinkel)
6. 2013–2014: Jonas Peters
7. 2019–2021: Yuansi Chen
8. 2019–2022: Armeen Taeb
9. 2020–2022: Mona Azadkia
10. 2022–current: Michael Law
11. 2022–current: Xinwei Shen
12. 2022–current: Alexander Henzi

Scientific advisory board committees
2020 – current: Co-Editor for Springer Series in Statistics.
2019 – current: Center for Statistical Science, Peking University.
2018 – current: MATRIX, international research institute in the
 mathematical sciences, Australia.
2018 – current: FMJH, Fondation Mathématique Jacques Hadamard, Paris.
2009 – current: Centro Stefano Franscini, conference center of ETH Zürich,
 Ascona, Switzerland.
2011: "Bioinformatics & Exploratory Biostatistics group" at Roche, Basel.

Selected keynote or special talks at Conferences
2022: Plneary talk at the 2nd Joint Congress of Mathematics co-organized
 by the American Mathematical Society, the European Mathematical
 Society and the Société Mathématique de France. Grenoble.
2022: Plenary talk at the annual meeting of the Isarel Statistical Society.
 Tel Aviv.
2021: Distinguished Theme Seminar Series 2021, Purdue University
 (virtual).
2020: Plenary Lecture. Joint conference of the GMDS & CEN-IBS 2020.
 Berlin (virtual).
2019: Semi-plenary Lecture. International Congress on Industrial and
 Applied Mathematics 2019. Valencia.
2018: Neyman Lecture. IMS-Vilnius meeting. Vilnius.
2018: Rothschild Lecture. Isaac Newton Institute. Cambridge.
2018: Keynote talk at 9th International Purdue Symposium on Statistics.
 Purdue University.
2017: Opening Lecture. International Meeting of the Psychometric Society
 (IMPS 2017). Zurich.
2017: Distinguished Speaker. IMS-China International Conference on
 Statistics and Probability 2017, Nanning, China.
2016: International Conference on Robust Statistics (ICORS 2016),
 Geneva, Switzerland.
2016: Distinguished Lecturer. 4th IMS-Asian Pacific Rim Meeting,
 Hong Kong.

2016: Minitutorial at SIAM Conference on Uncertainty Quantification (UQ16), Lausanne, Switzerland.

2016: 2nd UCL Workshop on the Theory of Big Data, London, UK.

2015: 31st Conference on Uncertainty in Artificial Intelligence (UAI), Amsterdam, Netherlands.

2015: Forum Lectures, European Meeting of Statisticians 2015, Amsterdam, Netherlands.

2015: Sackler Colloquium "Drawing Causal Inference from Big Data", National Academy of Sciences (USA), Washington DC, USA.

2014: Statistische Woche 2014, Hannover, Germany.

2014: 21st CompStat conference, Geneve, Switzerland

2014: 2nd ISNPS conference, Cadiz, Spain.

2014: 8th PLS 2014 conference, Paris, France.

2014: ENBIS-SFdS spring meeting, Paris, France.

2014: 17th International Conference on Artificial Intelligence and Statistics (AISTATS), Reykjavik, Iceland.

2013: 5th SPARS conference, Lausanne, Switzerland.

2013: 2nd WIPFOR conference, Paris, France.

2012: 5th ERCIM conference, Oviedo, Spain.

2011: Distinguished Speaker. IMS-China International Conference on Statistics and Probability 2011, Xian, China.

2010: Tutorial Lecture at 24th NIPS conference, Vancouver, Canada.

2010: 39th Lunteren Stochastics Meeting, Lunteren, Netherlands.

2010: 23rd NORDSTAT, Voss, Norway.

2009: XI CLAPEM conference, Caracas, Venezuela.

2009: Medallion Lecture (IMS) at JSM, Washington DC., USA.

2008: useR 2008, Dortmund, Germany.

Publications

Complete list at: `http://stat.ethz.ch/~buhlmann/publications/`
See also Google Scholar at: `http://scholar.google.com/citations?user=3r-fWJwAAAAJ&hl=en`

Selected publications:

1. N. Meinshausen and P. Bühlmann (2006). High-dimensional graphs and variable selection with the Lasso. *Annals of Statistics 34*, 1436–1462.

2. N. Meinshausen and P. Bühlmann (2010). Stability selection. *Journal of the Royal Statistal Society: Series B (discussion paper) 72*, 417–473.

3. D.J. Stekhoven and P. Bühlmann (2012). MissForest – nonparametric missing value imputation for mixed-type data. *Bioinformatics 28*, 112–118.

4. J. Peters, P. Bühlmann and N. Meinshausen (2016). Causal inference using invariant prediction: identification and confidence intervals. *Journal of the Royal Statistical Society: Series B (discussion paper) 78*, 947–1012.

5. P. Bühlmann and S. van de Geer (2011). Statistics for High-Dimensional Data: Methods, Theory and Applications. *Springer Series in Statistics. Springer.* (556 pages).