

Olga KLOPP

Professor

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Department: Information Systems, Data Analytics
and Operations
Campus de Cergy

DIPLOMAS

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|------|--|
| 2004 | Ph.D. in Mathematics
(Université Nationale Autonome de Mexico Mexico) |
| 1997 | Master in Mathematics and Applied Mathematics
(Université d'État Lomonossov de Moscou Russia) |
| 2016 | HDR
(Université Paris X Nanterre France) |

CAREER

FULL-TIME ACADEMIC APPOINTMENTS

- | | |
|-------------------|--|
| 2017 - 2023-09-01 | Associate Professor (ESSEC Business School France) |
| 2012 - 2017-08-31 | Assistant professor (Université Paris X Nanterre France) |
| 2004 - 2008-07-31 | Assistant professor (Université Nationale Autonome de Mexico Mexico) |
| 2023 - Now | Professor (ESSEC Business School France) |

OTHER ACADEMIC APPOINTMENTS

- | | |
|-------------------|---|
| 2010 - 2012-08-31 | Postdoctoral fellow (Centre de recherche en économie et statistique (CREST) France) |
| 2018 - 2024-08-31 | Pedagogical Head DD CentraleSupélec et ENSAE (ESSEC Business School France) |

2018 - 2023-08-31 Scientific Track Head (ESSEC Business School France)

OTHER APPOINTMENTS

2017 - 2017-08-31 Member of CNRS (Centre de recherche en économie et statistique (CREST) France)

PUBLICATIONS

PRESENTATIONS AT AN ACADEMIC OR PROFESSIONAL CONFERENCE

[KLOPP, O. \(2015\). 1-bit Matrix Completion. Dans: Indian Russian Conference in Statistics and Probability. Delhi.](#)

[KLOPP, O. \(2015\). Oracle inequalities for network models and sparse graphon estimation. Dans: Meeting in Mathematical Statistics. Frejus.](#)

[KLOPP, O. \(2015\). Oracle inequalities for network models and sparse graphon estimation. Dans: 2nd Heidelberg - Mannheim Stochastic Colloquium.](#)

[KLOPP, O. \(2016\). Confidence sets for matrix completion. Dans: Advances in nonparametric and high-dimensional Statistic. Frejus.](#)

[KLOPP, O. \(2016\). Matrix Completion. Dans: Multimedia Inpainting Workshop. Rennes.](#)

[KLOPP, O. \(2016\). Network models and sparse graphon estimation. Dans: NIPS workshop. Barcelona.](#)

[KLOPP, O. \(2016\). Oracle inequalities for network models and sparse graphon estimation. Dans: Joint Statistical Meeting. Chicago.](#)

[KLOPP, O. \(2016\). Oracle inequalities for network models and sparse graphon estimation. Dans: 3rd ISNPS conference. Avignon.](#)

[KLOPP, O. \(2016\). Oracle inequalities for network models and sparse graphon estimation. Dans: Modern problems of stochastic analysis and statistics. Moscow.](#)

[KLOPP, O. \(2017\). Optimal graphon estimation in cut distance. Dans: The Foundations in Computational Mathematics Conference. Barcelona.](#)

[KLOPP, O. \(2017\). Optimal graphon estimation in cut distance. Dans: Statistics meets Stochastics](#)

2. Moscow.

KLOPP, O., TSYBAKOV, A. et VERZELEN, N. (2018). Network models. Dans: Tercera jornada Franco-Chilena de Estadística. Valparaiso.

KLOPP, O. (2020). Robust network analysis. Dans: 13th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2020), Virtual Conference.

KLOPP, O. (2019). Matrix Completion: Old and New. Dans: 2019 Structural Inference in High-Dimensional Models 2.

KLOPP, O., TSYBAKOV, A. et VERZELEN, N. (2018). Network Models and Sparse Graphon Estimation. Dans: 14th Franco-Romanian Conference on Applied Mathematics.

KLOPP, O. et VERZELEN, N. (2017). Optimal Graphon Estimation in Cut Distance. Dans: Workshop on Community Detection and Network Reconstruction 2017.

KLOPP, O. et VERZELEN, N. (2018). Optimal Graphon Estimation in Cut Distance. Dans: 27th Nordic Conference in Mathematical Statistics (NORDSTAT) 2018.

KLOPP, O. et VERZELEN, N. (2018). Optimal Graphon Estimation in Cut Distance. Dans: Tercera jornada Franco-Chilena de Estadística.

KLOPP, O. (2019). Sparse Network Estimation. Dans: 2019 The Power of Graphs in Machine Learning and Sequential Decision -making.

KLOPP, O. (2019). Sparse Network Estimation. Dans: High dimensional probability and algorithms.

KLOPP, O., LU, Y., TSYBAKOV, A.B. et ZHOU, H.H. (2018). Structured Matrix Estimation and Completion. Dans: 4th Conference of the International Society for Nonparametric Statistics.

KLOPP, O. (2019). Modèles de réseaux parcimonieux. Dans: 2019 Colloquium de Montpellier.

KLOPP, O. (2020). Link Prediction in Sparse Graphon Model. Dans: 2020 EURANDOM Workshop: Graph Limits.

KLOPP, O., LOUNICI, K., TSYBAKOV, A.B. et ALAYA, M.Z. (2018). Robust Matrix Completion/Collective Matrix Completion. Dans: 40th Conference on Stochastic Processes and their Applications (SPA 2018).

GAUCHER, S. et KLOPP, O. (2022). Optimality of Variational Inference for Stochastic Block Model. Dans: 2022 Graph Limits, Nonparametric Models, and Estimation. Berkeley.

GAUCHER, S., KLOPP, O. et ROBIN, G. (2022). Outlier Detection in Networks. Dans: 2022 International Symposium on Nonparametric Statistics (ISNPS). Paphos.

GAUCHER, S. et KLOPP, O. (2023). Optimality of Variational Inference for Stochastic Block Model.

[Dans: Workshop on Eco-Stat Asymptotics 2023 WESA2023. Verona.](#)

[ENIKEEVA, F. et KLOPP, O. \(2023\). Change Point Detection in Dynamic Networks. Dans: 2023 Change Point Workshop at Warwick. Warwick.](#)

[GAUCHER, S. et KLOPP, O. \(2023\). Optimality of Variational Inference for Stochastic Block Model. Dans: 12th Workshop on High Dimensional Data Analysis \(HDDA-XII\) 2023. Paris.](#)

[KLOPP, O. \(2023\). Denoising Over Network with Application to Discrete-time Epidemic Process. Dans: 2023 Graph Limits and Processes on Networks Reunion. Berkeley.](#)

[KLOPP, O. \(2024\). Denoising over network with applications to partially observed epidemics. Dans: 2024 Statistical Machine Learning for High Dimensional Data. Singapore.](#)

[KLOPP, O. \(2024\). Low-rank density estimation. Dans: 2024 Workshop on Heterogeneous and Distributed Data. Warwick.](#)

[KLOPP, O. \(2024\). One bit total variation denoising with applications. Dans: 2024 Mathematical Aspects of Learning Theory - 20 years later. Barcelona.](#)

[KLOPP, O. \(2015\). Robust Matrix Completion. Dans: ISNPS Biosciences, Medicine, and novel Non-parametric Methods. Graz.](#)

[KLOPP, O. \(2015\). Robust Matrix Completion. Dans: The First International Conference on missing values MissData. Rennes.](#)

[KLOPP, O., TSYBAKOV, A. et VERZELEN, N. \(2018\). Network models and sparse graphon estimation. Dans: NordStat 2018. Tartu.](#)

[KLOPP, O., LOUNICI, K., TSYBAKOV, A. et ALAYA, M. \(2018\). Variety and Veracity of the Data in Matrix Completion. Dans: The 40th Conference on Stochastic Processes and their Applications. Gothenburg.](#)

[GAUCHER, S. et KLOPP, O. \(2021\). Optimality of variational inference for stochastic block model with missing links. Dans: 35th Conference on Neural Information Processing Systems \(NeurIPS2021\). Virtual.](#)

[KLOPP, O., PANOV, M., SIGILLA, S. et TSYBAKOV, A. \(2022\). Assigning Topics to Documents by Successive Projections. Dans: 2022 Institute of Mathematical Statistics \(IMS\) Annual Meeting. London.](#)

[KLOPP, O., DONNAT, C. et VERZELEN, N. \(2024\). Signal denoising on the graph with applications to the study of the epidemic spread. Dans: 2024 International Symposium on Nonparametric Statistics. Braga.](#)

[CHHOR, J., KLOPP, O. et TSYBAKOV, A. \(2024\). Generalized multi-view model: Adaptive density estimation under low-rank constraints. Dans: 2024 Bernoulli-IMS 11th World Congress in Probability](#)

[and Statistics. Bochum.](#)

CONFERENCE PROCEEDINGS

[ROBIN, G., WAI, H.T., JOSSE, J., KLOPP, O. et MOULINES, A. \(2018\). Low-Rank Interactions and Sparse Additive Effects Model for Large Data Frames. Dans: *Advances in Neural Information Processing Systems 31 \(NIPS 2018\)*.](#)

[KLOPP, O., LAFOND, J., MOULINES, E. et SALMON, J. \(2014\). Probabilistic low-rank matrix completion on finite alphabets. Dans: *NIPS*. Montréal: Neural Information Processing Systems.](#)

HDR

[KLOPP, O. \(2016\). HDR. France.](#)

JOURNAL ARTICLES

[ROBIN, G., KLOPP, O., JOSSE, J., MOULINES, E. et TIBSHIRANI, R. \(2019\). Main Effects and Interactions in Mixed and Incomplete Data Frames. *Journal of the American Statistical Association*, 115\(531\), pp. 1292-1303.](#)

[KLOPP, O. et VERZELEN, N. \(2018\). Optimal Graphon Estimation in Cut Distance. *Probability Theory and Related Fields*, 174, pp. 1033-1090.](#)

[KLOPP, O. \(2011\). Rank penalized estimators for high-dimensional matrices. *The Electronic Journal of Statistics*, 5, pp. 1161-1183.](#)

[KLOPP, O. et PENSKY, M. \(2013\). Non-asymptotic approach to varying coefficient model. *The Electronic Journal of Statistics*, 7, pp. 454-479.](#)

[KLOPP, O. \(2014\). Noisy low-rank matrix completion with general sampling distribution. *Bernoulli: A Journal of Mathematical Statistics and Probability*, 20\(1\), pp. 282-303.](#)

[KLOPP, O., LAFOND, J., MOULINES, E. et SALMON, J. \(2015\). Adaptive Multinomial Matrix Completion. *The Electronic Journal of Statistics*, 9\(2\), pp. 2950-2975.](#)

[KLOPP, O. et TSYBAKOV, A. \(2015\). Estimation of matrices with row sparsity. *Problems of Information Transmission*, 51\(4\), pp. 335-348.](#)

[KLOPP, O. \(2015\). Matrix completion by singular value thresholding : sharp bounds. *The Electronic Journal of Statistics*, 9\(2\), pp. 2348-2369.](#)

- [KLOPP, O. et PENSKY, M. \(2015\). Sparse high-dimensional varying coefficient model : non-asymptotic minimax study. *Annals of Statistics*, 43\(3\), pp. 1273-1299.](#)
- [KLOPP, O. et GAIFFAS, S. \(2017\). High dimensional matrix estimation with unknown variance of the noise. *Statistica Sinica*, 27\(1\), pp. 115-145.](#)
- [KLOPP, O., TSYBAKOV, A. et VERZELEN, N. \(2017\). Oracle inequalities for network models and sparse graphon estimation. *Annals of Statistics*, 45\(1\), pp. 316-354.](#)
- [KLOPP, O., LOUNICI, K. et TSYBAKOV, A. \(2017\). Robust Matrix Completion. *Probability Theory and Related Fields*, 169\(43862\), pp. 523-564.](#)
- [KLOPP, O., CARPENTIER, A., LÖFFLER, M. et NICKL, R. \(2018\). Adaptive confidence sets for matrix completion. *Bernoulli: A Journal of Mathematical Statistics and Probability*, 24\(4A\), pp. 2429-2460.](#)
- [KLOPP, O., LU, Y., TSYBAKOV, A.B. et ZHOU, H.H. \(2019\). Structured Matrix Estimation and Completion. *Bernoulli: A Journal of Mathematical Statistics and Probability*, 4B\(25\), pp. 3883-3911.](#)
- [GAUCHER, S., KLOPP, O. et ROBIN, G. \(2021\). Outlier detection in networks with missing links. *Computational Statistics and Data Analysis*, 164, pp. 107308.](#)
- [GAUCHER, S. et KLOPP, O. \(2021\). Maximum likelihood estimation of sparse networks with missing observations. *Journal of Statistical Planning and Inference*, 215, pp. 299-329.](#)
- [KLOPP, O., PANOV, M., SIGALLA, S. et TSYBAKOV, A. \(2023\). Assigning Topics to Documents by Successive Projections. *Annals of Statistics*, 51\(5\), pp. 1989-2014.](#)
- [ENIKEEVA, F., KLOPP, O. et ROUSSELOT, M. \(2025\). Change-point detection in low-rank VAR processes. *Bernoulli: A Journal of Mathematical Statistics and Probability*, 31\(2\), pp. 1058-1083.](#)
- [ENIKEEVA, F. et KLOPP, O. \(2025\). Change-Point Detection in Dynamic Networks with Missing Links. *Operations Research*, In press.](#)
- [DONNAT, C., KLOPP, O. et VERZELEN, N. \(2026\). Denoising over networks with applications to partially observed epidemics. *Computational Statistics and Data Analysis*, 215, pp. 108276.](#)
- [CHHOR, J., KLOPP, O. et TSYBAKOV, A. \(2025\). Generalized multi-view model: Adaptive density estimation under low-rank constraints. *Journal of Machine Learning Research*, In press, pp. 1-52.](#)
- [BORDINO, A. et KLOPP, O. \(2026\). Alberto Bordino and Olga Klopp's contribution to the Discussion of "Statistical exploration of the Manifold Hypothesis" by Whiteley et al. *Journal of the Royal Statistical Society: Series B \(Statistical Methodology\)*, qkag017, pp. 1-2.](#)

BOOK CHAPTERS

[CARPENTIER, A., KLOPP, O. et LÖFFLER, M. \(2019\). Constructing Confidence Sets for the Matrix Completion Problem. Dans: *Nonparametric Statistics*. 1st ed. Springer, pp. 103-119.](#)

[CHEN, J., SCHMIDT-HIEBER, J., DONNAT, C. et KLOPP, O. \(2025\). Understanding the Effect of GCN Convolutions in Regression Tasks. Dans: Li, Yingzhen, Stephan Mandt, Shipra Agrawal, and Emtiyaz Khan eds. *2025. Proceedings of the 28th International Conference on Artificial Intelligence and Statistics*. 1st ed. Proceedings of Machine Learning Research.](#)

INVITED SPEAKER AT AN ACADEMIC CONFERENCE

[KLOPP, O. et GAUCHER, S. \(2021\). Network Models and Sparse Graphon Estimation. Dans: *2021 Crimean Autumn Mathematical School-Symposium*. Satera.](#)

PRESS ARTICLE, VIDEO OR OTHER POPULAR MEDIA

[et KLOPP, O. \(2025\). Denoising Epidemic Data: A New Approach to Improving Disease Spread Predictions. *ESSEC Knowledge*.](#)

RESEARCH ACTIVITIES

Organization of a conference or a seminar

- 2017 - 2017: Co-organizer of Working Group on Risk (ESSEC Business School France)
- 2024 - 2026: Meeting in Mathematical Statistics (CIRM France)
- 2024 - Now: Forecasting & Optimization: Streamlining Supply Chains (ESSEC Business School France)
- 2025 - 2025: New Developments in the Theory and Methodology of Graph Neural Networks (NITMB Institute United States of America)

Editorial Board Membership

- 2016 - 2022: Editorial board membership - Bernoulli: A Journal of Mathematical Statistics and Probability
- 2025 - Now: Associated Editor

Senior or Associate Editor

- 2026 - Now: Associate Editor - Computational Statistics and Data Analysis