Papers, Books, and Monographs | Victor M. Panaretos

Preprints

Picard, F., Roche, A., Rivirard, V. & Panaretos, V.M.
\textbf{PCA for Point Processes.}

Yun, H. & Panaretos, V.M.
\textbf{Computerized Tomography and Reproducing Kernels.}

Santoro, L.V., & Panaretos, V.M.
\textbf{Statistical Inference for Bures–Wasserstein Flows.}

Waghmare, K.G., Masak, T. & Panaretos, V.M.
\textbf{The Functional Graphical Lasso.}

Ghodrati, L. & Panaretos, V.M.
\textbf{Transportation of Measure Regression in Higher Dimensions.}

Santoro, L.V., & Panaretos, V.M.
\textbf{Large Sample Theory for Bures–Wasserstein Barycentres.}

Papers

Waghmare, K.G. & Panaretos, V.M.
\textbf{Continuously Indexed Graphical Models.}

Waghmare, K.G., & Panaretos, V.M. (2024)
\textbf{The Positive-Definite Completion Problem.}

Santoro, L.V., Waghmare, K.G. & Panaretos, V.M. (2024)
\textbf{A Karhunen-Loève Theorem for Random Flows in Hilbert spaces.}
\textit{Electronic Communications in Probability, 29} (30), 1-12.

Mohammadi, N., Santoro, L.V. & Panaretos, V.M. (2024)
\textbf{Nonparametric Estimation for SDE with Sparsely Sampled Paths: an FDA Perspective.}
Masarotto, V., Panaretos, V.M. & Zemel, Y. (2024)  
Transportation-Based Functional ANOVA and PCA for Covariance Operators.  

Mohammadi, N. & Panaretos, V.M. (2024)  
Functional Data Analysis with Rough Sample Paths?  

Ghodrati, L. & Panaretos, V.M. (2024)  
On Distributional Autoregression and Iterated Transportation.  

Masak, T. & Panaretos, V.M. (2023)  
Random Surface Covariance Estimation by Shifted Partial Tracing.  

Mohammadi, N. & Panaretos, V.M. (2023)  
Detecting Whether a Stochastic Process is Finitely Expressed in a Basis.  
*Applied and Computational Harmonic Analysis, 67*, 101578.

Masak, T., Sarkar, S. & Panaretos, V.M. (2023)  
Separable Expansions for Covariance Estimation via the Partial Inner Product.  

Ghodrati, L. & Panaretos, V.M. (2023)  
Minimax Rate for Optimal Transport Regression Between Distributions.  

Chakraborty, A. & Panaretos, V.M. (2022)  

Waghmare, K. & Panaretos, V.M. (2022)  
The Completion of Covariance Kernels.  

Sarkar, S. & Panaretos, V.M. (2022)  
Covariance Networks for Functional Data on Multidimensional Domains.  

Ghodrati, L. & Panaretos, V.M. (2022)  
Distribution-on-Distribution Regression via Optimal Transport Maps.  

Masak, T., Rubin, T. & Panaretos, V.M. (2022)  
Inference and Computation for Sparsely Sampled Random Surfaces.  
Functional Estimation of Anisotropic Covariance and Autocovariance Operators on the Sphere.

Caponera, A. & Panaretos, V.M. (2022)
On the Rate of Convergence for the Autocorrelation Operator in Functional Autoregression.

Chakraborty, A. & Panaretos, V.M. (2021)
Functional Registration and Local Variations: Identifiability, Rank, and Tuning.
Bernoulli 27 (2):1103–1130.

Rubin, T. & Panaretos, V.M. (2020)
Functional Lagged Regression with Sparse Noisy Observations.

Rubin, T. & Panaretos, V.M. (2020)

Statistical Aspects of Wasserstein Distances.

Recovering Covariance from Functional Fragments.

Procrustes Metrics on Covariance Operators and Optimal Coupling of Gaussian Processes.

Hybrid regularisation and the (in)admissibility of ridge regression in infinite dimensional Hilbert spaces.

Functional Data Analysis By Matrix Completion.

Fréchet Means and Procrustes Analysis in Wasserstein Space.

Pham, T. & Panaretos, V.M. (2018)
Methodology and Convergence Rates for Functional Time Series Regression.
Statistica Sinica, 28: 2521–2539 (Special Issue in Memory of Peter Hall).
Empirical Evolution Equations.

Detecting and Localising Differences in Functional Time Series Dynamics: A Case Study in Molecular Biophysics.

Amplitude and Phase Variation of Point Processes.

Statistical Unfolding of Elementary Particle Spectra: Empirical Bayes Estimation and Bias-Corrected Uncertainty Quantification.

Principal Flows.

Frequentist Estimation of The Spreading Potential of an Epidemic when Observations are Scarce.

Cramér-Karhunen-Loève Representation and Harmonic Principal Component Analysis of Functional Time Series

Fourier Analysis of Stationary Time Series in Function Space

Dispersion Operators and Resistant Second-Order Functional Data Analysis.

Nonparametric Construction of Multivariate Kernels

Asymptotic Inference for Partially Observed Branching Processes.

Sparse Approximations to Protein Structure from Noisy Random Projections.
A Conversation with David R. Brillinger.

Second–Order Comparison of Gaussian Random Functions and the Geometry of DNA Minicircles.
*Journal of the American Statistical Association (Theory & Methods)*, **105**: 670–682.

On Random Tomography With Unobservable Projection Angles.

Representation of Radon Shape Diffusions via Hyperspherical Brownian Motion.

Partially Observed Branching Processes for Stochastic Epidemics.

The Diffusion of Radon Shape.

**Books and Monographs**

Panaretos, V. M. & Zemel, Y. (2020)
*An Invitation to Statistics in Wasserstein Space*.

*Statistics for Mathematicians: A Rigorous First Course*.
Compact Textbooks in Mathematics, Birkhäuser.

*Statistique pour Mathématiciens: Un Premier Cours Rigoureux*.
Presses Polytechniques et Universitaires Romands.

**Book Chapters**

Commentary on Selected Mathematical Papers of D.R. Brillinger.
In *Selected Works of David Brillinger (ed. P. Guttorp)*, Springer.
Refereed Conference Proceedings

A Statistician’s View on Deconvolution and Unfolding