

PUBLICATION LIST

Satarupa Bhattacharjee

Department of Statistics, Pennsylvania State University

Email: sfb5992@psu.edu

ACCEPTED/ PUBLISHED PROJECTS

- Bhattacharjee, S., and Müller, H. G. (2023). Single index Fréchet regression. (*Accepted, Annals of Statistics*). ([pdf](#)).
- Bhattacharjee, S., and Müller, H. G. (2022). Concurrent object regression. *Electronic Journal of Statistics*, 16(2), 4031-4089. ([pdf](#))
- Dubey, P., Chen, Y., Gajardo, Á., Bhattacharjee, S., Carroll, C., Zhou, Y., and Müller, H. G. (2022). Learning delay dynamics for multivariate stochastic processes, with application to the prediction of the growth rate of COVID-19 cases in the United States. *Journal of Mathematical Analysis and Applications*, 514(2), 125677. ([pdf](#))
- Bhattacharjee, S., Liao S., Paul, D., and Chaudhuri, S. (2021). Inference on the dynamics of COVID-19 in the USA. *Nature Scientific Reports*, 12(1), 1-15. ([pdf](#))
- Bhattacharjee, S., Liao, S., Paul, D., and Chaudhuri, S. (2021). Taming the pandemic by doing the mundane. *In Managing Complexity and COVID-19 (pp. 62-82)*, Routledge. ([pdf](#))
- Carroll, C., Bhattacharjee, S., Chen, Y., Dubey, P., Fan, J., Gajardo, Á., Zhou, X., Müller, H. G., and Wang, J-L. (2020). Time dynamics of COVID-19. *Nature- Scientific Reports*, 10(1), 21040. ([pdf](#))



PREPRINTS

- Bhattacharjee, S. and Müller, H. G. (2023–). Mixed-effects modeling of longitudinal random objects. *ArXiv preprint, Under review for JASA*. ([pdf](#))
- Bhattacharjee, S., Li, B., Xue, L. (2023–). Nonlinear global Fréchet regression for random objects via weak conditional expectation. *ArXiv preprint, Under review for Annals of Statistics*.

ONGOING PROJECTS

- Bhattacharjee, S., Li, B., Xue, L. (2023–). Causal inference on distributional data with continuous treatments.
- Arya, S., Bhattacharjee, S., and Sriperambudur, B. (2023–). Index models for contextual bandit problems.
- Zhang, Q. and Bhattacharjee, S. (2023–). Geodesic set distribution regression.
- Bhattacharjee, S. (2023–). Residual analysis for random object regression.

SOFTWARE

- fdapace: Functional Data Analysis and Empirical Dynamics ([R package](#)) 
Contributing author
- frechet: Statistical Analysis for Random Objects and Non-Euclidean Data ([R package](#)) 
Contributing author

- fdaconcur: Concurrent Regression and History Index Models for Functional Data ([R package](#)) downloads 2148
Creator, maintainer, and contributing author
- SDRReg: Dimension Reduction and Regression Methods for High-dimensional and Complex (Non-Euclidean) Data ([R package](#), [Test version](#))
Creator, maintainer, and contributing author