

USTHB

FACULTÉ de MATHÉMATIQUE

DÉPARTEMENT de PROBABILITÉ et STATISTIQUE

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Salle 107 Bloc CAM 11h30

**Nonparametric relative error functional regression with
incomplete data**

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Abstract:

Recent technological advances have enabled the observation of phenomena at increasingly finer resolutions, resulting in data represented as functions (functional data). This talk presents some theoretical results investigating the consistency and asymptotic distribution of a nonparametric relative error regression estimator in the context where the response variable is subject to left truncation and right censoring, while the predictor is of functional type. Additionally, we use simulated and real world data to validate the theoretical findings, demonstrating the estimator's reliability and practical applicability.