Elements of Functional Data Analysis: Assessment

Please send your solution by email (a.duncan@imperial.ac.uk).
Deadline: 15th of March 2021

Choose **one** journal paper which you find interesting thats covers some aspect of functional data analysis, applied or methodological, and provide a short but comprehensive summary of the paper, including main results, summary of any proofs. If relevant, also perform some numerical experiments which reproduces some plots or results in the paper.

Some recommended papers to look at

1. Cuevas, Antonio, Manuel Febrero, and Ricardo Fraiman. "Robust estimation and classification for functional data via projection-based depth notions." Computational Statistics 22.3 (2007): 481-496.

2. Berrendero, José R., Beatriz Bueno-Larraz, and Antonio Cuevas. "On Mahalanobis Distance in Functional Settings." Journal of Machine Learning Research 21.9 (2020): 1-33.

3. Masarotto, Valentina, Victor M. Panaretos, and Yoav Zemel. "Procrustes metrics on covariance operators and optimal transportation of Gaussian processes." Sankhya A 81.1 (2019): 172-213.

4. Panaretos, Victor M., David Kraus, and John H. Maddocks. "Second-order comparison of Gaussian random functions and the geometry of DNA minicircles." Journal of the American Statistical Association 105.490 (2010): 670-682.

5. Hall, Peter, and Ingrid Van Keilegom. "Two-sample tests in functional data analysis starting from discrete data." Statistica Sinica (2007): 1511-1531.

You may also choose any other paper you might be interested in; however, I would prefer if you emailed me with the title of the paper and your plans before going ahead

Note: the deadline is a month away, but I do not expect you to do more than what is reasonably achievable within a day.