

# Stochastic Wasserstein Barycenters (Computational Optimal Transport Project)

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## **Abstract**

Abstract (½ page): What problem(s) is studied? Why is it relevant? What solution(s) is proposed? Which contributions (theory, numerics, etc) ?

## 1 Introduction

Introduction ( 3 pages) : Presentation of the problem(s). Previous works (at least a few citations). If relevant, include things that you have seen during the MVA course (or possibly other courses). Contributions. Why is the studied method different/better/worse/etc. than existing previous works.

## 2 Presentation of the method

Main body ( 10 pages) : Presentation of the method(s). [1]

### 2.1 Theoretical guarantees

Theoretical guarantees.

### 2.2 Numerical implementation / Experiments

Numerics.

## 3 Conclusion and Perspectives

Conclusion and perspective ( 1 page) Summary of the result obtained: pros and cons (limitation, problems, error in the articles, etc) Possible improvement/extension

## 4 Connection with the course

What are the notions/results/algorithms presented in the course that are used or related to the one presented in this paper?

## References

- [1] S. Clatici, E. Chien, and J. Solomon, *Stochastic wasserstein barycenters*, Jun. 6, 2018. arXiv: [1802.05757](https://arxiv.org/abs/1802.05757) [cs, math, stat]. [Online]. Available: <http://arxiv.org/abs/1802.05757> (visited on 12/21/2023).