Clément Bonet

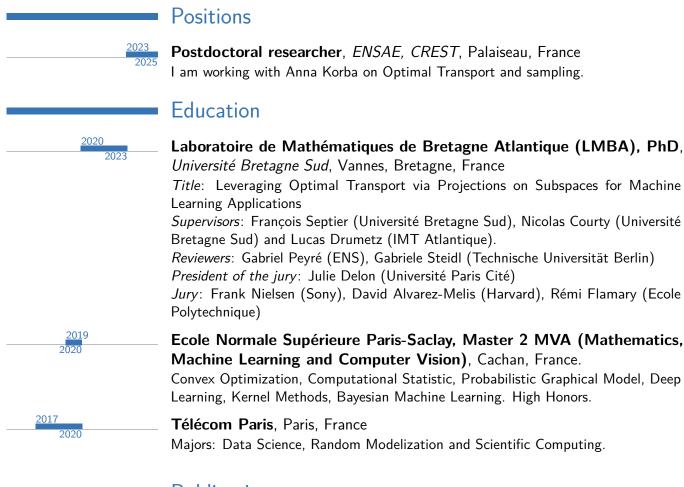
Curriculum Vitae

☑ clement.bonet@ensae.fr

☐ https://clbonet.github.io

☐ clement-bonet-2840a9153

☐ clbonet



Publications

- * denotes equal contribution
- [1] Clément Bonet, Lucas Drumetz, and Nicolas Courty. "Sliced-Wasserstein Distances and Flows on Cartan-Hadamard Manifolds". In: Accepted with minor revision at Journal of Machine Learning Research (JMLR) (2025).
- [2] Clément Bonet, Théo Uscidda, Adam David, Pierre-Cyril Aubin-Frankowski, and Anna Korba. "Mirror and Preconditioned Gradient Descent in Wasserstein Space". In: **Spotlight** in Advances in Neural Information Processing Systems (**NeurIPS**). 2024.
- [3] Clément Bonet*, Kimia Nadjahi*, Thibault Séjourné*, Kilian Fatras, and Nicolas Courty. "Slicing Unbalanced Optimal Transport". In: *Transactions on Machine Learning Research (TMLR)* (2024).
- [4] Guillaume Mahey, Laetitia Chapel, Gilles Gasso, Clément Bonet, and Nicolas Courty. "Fast Optimal Transport through Sliced Wasserstein Generalized Geodesics". In: **Spotlight** in Advances in Neural Information Processing Systems (NeurIPS). 2023.
- [5] Clément Bonet*, Benoît Malézieux*, Alain Rakotomamonjy, Lucas Drumetz, Thomas Moreau, Matthieu Kowalski, and Nicolas Courty. "Sliced-Wasserstein on Symmetric Positive Definite Matrices for M/EEG

- Signals". In: *Proceedings of the 40th International Conference on Machine Learning (ICML)*. vol. 202. Proceedings of Machine Learning Research. PMLR, **2023**, pp. 2777–2805.
- [6] Clément Bonet, Laetitia Chapel, Lucas Drumetz, and Nicolas Courty. "Hyperbolic Sliced-Wasserstein via Geodesic and Horospherical Projections". In: Proceedings of 2nd Annual Workshop on Topology, Algebra, and Geometry in Machine Learning (TAG-ML). vol. 221. Proceedings of Machine Learning Research. PMLR, 2023, pp. 334–370.
- [7] Clément Bonet, Paul Berg, Nicolas Courty, François Septier, Lucas Drumetz, and Minh-Tan Pham. "Spherical Sliced-Wasserstein". In: *International Conference on Learning Representations (ICLR)*. 2023.
- [8] Clément Bonet, Nicolas Courty, François Septier, and Lucas Drumetz. "Efficient Gradient Flows in Sliced-Wasserstein Space". In: *Transactions on Machine Learning Research* (*TMLR*) (2022).
- [9] Clément Bonet, Titouan Vayer, Nicolas Courty, François Septier, and Lucas Drumetz. "Subspace Detours Meet Gromov–Wasserstein". In: *Algorithms* 14.12 (2021), p. 366.

Preprints

[10] Jonathan Geuter, Clément Bonet, Anna Korba, and David Alvarez-Melis. *DDEQs: Distributional Deep Equilibrium Models through Wasserstein Gradient Flows.* Submitted to AISTATS. **2024**.

Other Research Experiences

Reviews I have reviewed at different journals/conferences: AISTATS 2022, 2023, 2025, ICML 2022, 2023, 2024 (Outstanding Reviewer in 2022), Neurips 2022, 2023, 2024, ICLR

2024, 2025, TMLR since 2024, JMLR.

Open source Contributor to the Python Optimal Transport library: https://pythonot.github.io.

Talks

20/12/2024 Mokameeting, Inria Paris.

05/12/2024 NeurIPS in Paris.

03/12/2024 OCKHAM Seminar, Inria Lyon.

05/08/2024 Level Set meeting, UCLA.

28/02/2024 SIAM Conference on Uncertainty Quantification (UQ24).

22/01/2024 Groupe de Travail (GdT) OT-PDE-ML, Institut de Mathématique d'Orsay.

08/01/2024 CREST Seminar, ENSAE.

03/07/2023 Conférence sur l'Apprentissage Automatique (CAp) 2023, Strasbourg.

06/10/2022 Team Seminar, IRISA.

07/06/2022 Laboratory Seminar, LMBA.

13/12/2021 Spotlight poster at the Neurips Workshop Optimal Transport and Machine Learning (OTML).

19/11/2021 Team Seminar of Dynamical Systems, Probabilities and Statistics, LMBA.

18/11/2021 Groupement de Recherche (GDR), Information Signal Image Vision (ISIS), Optimal Transport and Machine Learning (OTML), Institut Henri Poincaré.

24/09/2021 Team seminar, IRISA.

Professional Experiences

Teaching Assistant

