

Estéban Gabory

Education

- 2021 – Now • **Ph.D. in Computer Science, CWI Amsterdam, The Netherlands**,
Supervisors: Solon P. Pissis, Leen Stougie,
Thesis title: *Pangenome alignment and comparison*.
- 2020 – 2021 • **M.Sc. Fundamental Mathematics, Université de Paris (Second year) Paris, France**,
Supervisor: Laurent Bulteau,
Thesis title: *Parametrized algorithms for consensus problems with swaps*.
- 2020 • **Summer research internship, Université de Brest Brest, France**,
Supervisor: Johannes Huisman,
Topic: *Class Field Theory*.
- 2019 – 2020 • **M.Sc. Fundamental Mathematics, Université Rennes 1 (First year) Rennes, France**,
Supervisor: Ludovic Marquis,
Thesis title: *Tessellations of the Hyperbolic Plane*.
- 2018–2019 • **Exchange year in the department of Mathematics, Sapienza Università di Roma Rome, Italy**.
- 2017 – 2019 • **Bachelor in Mathematics, Sorbonne Université Paris, France**.

Teaching

Vrije Universiteit

- Algorithms in Sequence Analysis, Master Course (2023) - **Teaching Assistant**.

Université de Paris

- Undergraduate Algebra, third year (2021) - **Teaching Assistant**.
- Undergraduate Algebra, second year (2021) - **Teaching Assistant**.
- Undergraduate Analysis, third year (2021) - **Teaching Assistant**.
- Undergraduate Analysis, second year (2021) - **Teaching Assistant**.

Association Science Technologie et Santé

- Introduction to programming with "Scratch" - Elementary school supervision for scientific activities.

Professional service

Program Committee Memberships

- IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2023).

Reviewing

- Symposium on String Processing and Information Retrieval (SPIRE 2023) - **Subreviewer**.
- Annual Symposium on Combinatorial Pattern Matching (CPM 2023) - **Subreviewer**.
- Workshop on Algorithms in Bioinformatics (WABI 2022) - **Subreviewer**.

Organising Committee Memberships

- Symposium on String Processing and Information Retrieval (SPIRE 2023).
- European Symposium on Algorithms (ALGO 2023).

PhD Courses, schools, and workshops





- Landelijk Netwerk Mathematische Beslikunde - "Randomized Algorithms" (2023).
- Winter School - "Collaborating with wet-lab biologists" (2023).
- Landelijk Netwerk Mathematische Beslikunde - "Networks and Semidefinite Programming" (2022).
- Annual ALPACA Workshop - "Pan-genome sequencing and analysis" (2022).
- Summer School - "Algorithmic techniques in pan-genomics" (2022).
- Landelijk Netwerk Mathematische Beslikunde - "Integer Programming Methods" (2021).
- Annual ALPACA Workshop - "Challenges of computational pan-genomics" (2021).

Research Grants

- Marie Skłodowska-Curie Innovative Training Network (MSCA-ITN-2020) on Algorithms for Pangenome Computational Analysis (ALPACA) – Role: Early Stage Researcher.

Research Publications

Conference Proceedings

- [1] E. Gabory, M. N. Mwaniki, N. Pisanti, *et al.*, "Comparing Elastic-Degenerate Strings: Algorithms, Lower Bounds, and Applications," in *34th Annual Symposium on Combinatorial Pattern Matching (CPM 2023)*, L. Bulteau and Z. Lipták, Eds., ser. Leibniz International Proceedings in Informatics (LIPIcs), vol. 259, Dagstuhl, Germany: Schloss Dagstuhl – Leibniz-Zentrum für Informatik, 2023, 11:1–11:20, ISBN: 978-3-95977-276-1.  DOI: 10.4230/LIPIcs.CPM.2023.11.  URL: <https://drops.dagstuhl.de/opus/volltexte/2023/17965>.
- [2] E. Gabory, E. Rivals, M. Sweering, H. Verbeek, and P. Wang, "Periodicity of degenerate strings," in *Proc. of 26th Prague Stringology Conference*, J. Holub and S. Pissis, Eds., ISBN: 978-80-01-07206-6, Faculty of Information Technology, Czech Technical University in Prague, Prague, Czech Republic: Czech Technical University in Prague, Aug. 2023, pp. 42–56.
- [3] G. Bernardini, A. Conte, E. Gabory, *et al.*, "On Strings Having the Same Length-k Substrings," in *33rd Annual Symposium on Combinatorial Pattern Matching (CPM)*, Prague, Czech Republic, 2022.  DOI: 10.4230/LIPIcs.CPM.2022.16.  URL: <https://inria.hal.science/hal-03829979>.
- [4] G. Bernardini, E. Gabory, S. P. Pissis, L. Stougie, M. Sweering, and W. Zuba, "Elastic-degenerate string matching with 1 error," in *LATIN 2022: Theoretical Informatics*, A. Castañeda and F. Rodríguez-Henríquez, Eds., Cham: Springer International Publishing, 2022, pp. 20–37, ISBN: 978-3-031-20624-5.