

Elias VENTRE.
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Curriculum Vitae

EDUCATION

- Since 2019 **INRIA Dracula & LBMC – PhD in applied mathematics.**
▪ *From molecular networks to cellular fate: multiscale analysis of gene expression.*
- 2019 **UCBL Lyon 1 – Master in applied mathematics, with highest honor (2/39).**
- 2015 **ENSA Paris-Belleville – Master in Architecture.**
▪ *One-year exchange program in UC, Santiago de Chile (2014).*
- 2013 **ESTP Paris – Master in Building Engineering.**
- 2008 **Lycée Louis Le Grand – High School Diploma, with honor.**

TEACHING & PROFESSIONAL ACTIVITIES

- Since 2019 **UCBL, Teaching assistant.**
▪ *In charge of the course of General Mathematics for 1st-year students, spring semester.*
- 2018-2019 **LBMC, Internships in applied mathematics.**
▪ *Mathematical formulation of Waddington Landscape for a stochastic hybrid model of gene expression (4 months).*
▪ *Computation of transfer entropy for a Piecewise Deterministic Markovian Process (1 month).*
- 2015-2017 **SYNTESIA, Project manager in Building Information Modeling – 22 months.**
- 2013 **ARTER, Engineering of ephemeral art – 6 months.**

LANGUAGES

French	Mother tongue.
English & Spanish	Fluent.
Informatics	Python & C, Latex.

PUBLICATIONS

- Preprint** Ventre, E. (2021). Reverse engineering of a mechanistic model of gene expression using metastability and temporal dynamics. *bioRxiv*.
<https://doi.org/10.1101/2021.06.01.446414>
- Preprint** Ventre, E., Espinasse, T., Bréhier, C. E., Calvez, V., Lepoutre, T., & Gandrillon, O. (2020). Reduction of a stochastic model of gene expression: Lagrangian dynamics gives access to basins of attraction as cell types and metastability. *bioRxiv*.
<https://doi.org/10.1101/2020.09.04.283176>

TALKS & POSTERS

- 06/2021 **University of Lorraine, Probabilistic group – Nancy.**
- 05/2021 **SMAI, Congress – Poster.**
- 12/2020 **SinCellMod-2020 – Virtual.**
- 10/2020 **ANR SingleStatOmics – Virtual.** <https://anr-singlestatomics.pages.math.cnrs.fr>
- 02/2020 **CIRM, Research School – Poster.**
- 10/2019 **INRIA-Bio Workshop – Lyon.**

PERSONNAL Violin and Guitar. Acting in lay theatre. Hiking, Tennis in competition.