Elias VENTRE.
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Curriculum Vitae

EDUCATION

Since 2019 **INRIA Dracula & LBMC – Ph.D 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.*

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 Wadddington Landscape for a stochastic hybrid model of gene expression (4 months).*
- *Computation of transfer entropy for a Piecewise Deterministic Markovian Process (1 months).*

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 acces to basins of attraction as cell types and metastability. *bioRxiv*. https://doi.org/10.1101/2020.09.04.283176

TALKS & POSTERS

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.