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## Curriculum Vitae

### EDUCATION

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- 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

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- Since 2019      **UCBL, Teaching assistant.**  
▪ *In charge of the course of General Mathematics for 1<sup>st</sup>-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 months).*
- 2015-2017      **SYNTESIA, Project manager in Building Information Modeling – 22 months.**
- 2013              **ARTER, Engineering of ephemeral art – 6 months.**

### LANGUAGES

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<b>French</b>	Mother tongue.
<b>English &amp; Spanish</b>	Fluent.
<b>Informatics</b>	Python & C, Latex.

### PUBLICATIONS

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- 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

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- 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.