

PAUL COUSIN

✉ paul.cousin@etu.u-paris.fr 🌐 paulcousin.net 🆔 0000-0002-3866-7615 📧 paulcousin

Education

International Master's Degree in Physics Of Complex Systems **Sep. 2023 – Ongoing**
SISSA & ICTP & PoliTO & UP Cité & Sorbonne & Paris Saclay *Trieste – Turin, Italy & Paris, France*

International Bachelor's Degree in Physics (with Highest Honors) **Jan. 2021 – May 2023**
Université Grenoble Alpes & University of North Carolina at Chapel Hill *Grenoble, France & Chapel Hill, USA*

Advanced Audiovisual Technician's Certificate, Specialized in Editing **Sep. 2011 – May 2013**
Lycée de la Communication *Metz, France*

Self-Education | Certified Online Courses **2021 – 2024**

- Computation in Complex Systems [↗](#)
- Foundations & Applications of Humanities Analytics [↗](#)
- Fractals and Scaling [↗](#)
- Game Theory [↗](#)
- Introduction to Complexity [↗](#)
- Introduction to Dynamical Systems and Chaos [↗](#)
- Introduction to Mathematical Thinking [↗](#)
- Learn JavaScript Course [↗](#)
- Learn Python 3 Course [↗](#)
- Machine Learning [↗](#)
- Nonlinear Dynamics: Mathematical and Computational Approaches [↗](#)
- Origins of Life [↗](#)
- Skepticism [↗](#)
- The Git & Github Bootcamp [↗](#)

Internship

Excellence Internship granted by the Université Grenoble Alpes **June – July 2022**
Laboratoire Jean Kuntzmann (Applied Mathematics & Informatics) *Grenoble, France*

Publications

P. Cousin, "Triangular Automata: The 256 Elementary Cellular Automata of the 2D Plane," *Complex Systems*, 33(2), 2024.

P. Cousin and A. Maignan, "Organic Structures Emerging From Bio-Inspired Graph-Rewriting Automata," 2022 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Hagenberg / Linz, Austria, 2022, pp. 293-296, doi: 10.1109/SYNASC57785.2022.00053.

Projects

Triangular Automata **2023 – 2024**
• Website [↗](#) • Mathematica Package [↗](#) • OEIS entries [↗](#) • YouTube channel [↗](#)

Graph-Rewriting Automata **2022**
• Website [↗](#) • Mathematica Package [↗](#) • Python Package [↗](#)

Work Experience

Nurseryman **2017 – 2020**
Creation of a professional activity in agriculture *Verrue, France*

Founder & President **2016 – 2018**
Association invested in circular economy for ecology and social fairness *Loudun, France*

Logistics Coordinator **Aug. 2015 – July 2016**
Agricultural training organization promoting sustainable practices *Grasse, France*

Skills

Programming: Mathematica, Python, L^AT_EX, HTML/CSS, JavaScript, NetLogo, VS Code, GitHub

Arts: Music [↗](#), Video Production [↗](#)

Languages: French English, Esperanto, Toki Pona, Italian, Spanish
native fluent intermediate elementary