Emile Hohnadel

	Education
July 1st 2025	PhD defence, UGA, INRIA, LJK, France
2021–2025	PhD thesis, UGA, INRIA, LJK, France
2017–2021	Diplome de l'ENS de Lyon, ENS de Lyon, France
2018–2020	Master Degree in Computer Science, ENS de Lyon, France, Mention Très Bien
2017–2018	Bachelor Degree in Computer Science, ENS de Lyon, France, Mention Bien
2017–2018	Bachelor Degree in Mathematics, Université Claude Bernard, France
2014–2017	Classe préparatoire, MPSI/MP*, Lycée Kléber, France
2014	Baccalauréat Série S Sciences de l'ingénieur Section européenne, Lycée Jean-Jacques Henner, France, Mention Très Bien
	Internships
April. 21–July 21 4 months	Research Internship , ∂ 'Alembert Institute, France, supervised by Sébastien Neukirch
	Drops on fibre, how big can it go? Modelisation of droplet hanging from thin fibre to test an experimental observation
Sept. 20–Mars 21 6 months	Research Internship , <i>INRIA Grenoble</i> , France, supervised by Florence Bertails—Descoubes and Thibaut Métivet
	Simulation of elastic fibre flow: Extension of a 2D elastic fibre simulator to account for fibre/fibre contact.
Jan. –June 2020 6 months	Research Internship , <i>LIRIS</i> , France, supervised by Nicolas Bonneel, Julie Digne and Bruno Lévy
	Lagrangian Simulation of Navier-Stokes Fluid with Free Surfaces: Extension of an inviscid fluid solver based on the theory of optimal transport to model buckling effects.
May-July 2019	Research Internship, JAIST, Japan, supervised by Mizuhito Ogawa
3 months	Windows API call impact on path condition: Study of the impact of external calls to the path condition during dynamic symbolic execution.
	Research Internship, INRIA Nancy, France, supervised by Bruno Lévy
7 weeks	Numerical fluid simulation using power diagrams: Applying results of the optimal transport theory to the Lagrangian modelisation of fluids.

Languages

French Mother tongue

English C1 - Cambridge Advanced Exam

German B1 - Deutsches Sprachdiplom

Japanese A2

Computer skills

Programming C, C++ (Eigen), Python (numpy, scipy)

Tools LATEX, Git

Publications

- July 2024 Contact detection between curved fibres: high order makes a difference, O. Crespel*, E. Hohnadel*, T. Métivet, F. Bertails-Descoubes, ACM Trans. Graph. 43, 4, Article 132, 23 pages
 - *These authors contributed equally.
- August 2023 Randomly stacked open cylindrical shells as functional mechanical energy absorber, T. G. Sano*, <u>E. Hohnadel</u>*, T. Kawata, T. Métivet, F. Bertails-Descoubes, Communications Materials, 4(1):59

 *These authors contributed equally.

Conferences and seminars

- 7-11 July 2025 Accurate frictional contact algorithms for the numerical exploration of the mechanics of fibrous assemblies, *ESMC Lyon*, <u>E. Hohnadel</u>, O. Crespel, T. G. Sano, T. Métivet, F. Bertails-Descoubes
- 28 July 2024 **Contact detection between curved fibres : high order makes a difference**, 1 August 2024 *Siggraph 2024*, O. Crespel, E. Hohnadel, T. Métivet, F. Bertails-Descoubes
- 18-20 Mars 2024 **High order contact detection between fibres**, *Rencontre du Non Linéaire 2024*, E. Hohnadel, O. Crespel, T. Métivet, F. Bertails-Descoubes
- 22-26 September Accurate contact detection and response in fibre assemblies with friction, 2023 Highly Flexible Slender Structure 2023, E. Hohnadel, O.Crespel, T. Métivet, F. Bertails-Descoubes
 - 6-7 July 2023 Randomly stacked open cylindrical shells as functional mechanical energy absorber, *Groupe de travail "Animation & Simulation"*, E. Hohnadel, T. G. Sano, T. Kawata, T. Métivet, F. Bertails-Descoubes
 - 16-19 October Investigating the compaction of open ring stacks through real and numerical experiments, *Graphyz 2*, <u>E. Hohnadel</u>, T. G. Sano, T. Kawata, T. Métivet, F. Bertails-Descoubes
- 10 October 2022 Frictional three-point bending test: disentangling the role of friction through real and numerical experiments, *GdR Méphy: Friction & Slender Structures*, <u>E. Hohnadel</u>, J. Marthelot, I. Andrade-Silva, T. Métivet, O. Pouliquen, F. Bertails-Descoubes
 - 7-11 July 2022 Investigating the compaction of open ring stacks through real and numerical experiments, ESMC Galway, E. Hohnadel, T. G. Sano, T. Kawata, T. Métivet, F. Bertails-Descoubes
 - 7-11 July 2022 Frictional three-point bending test: disentangling the role of friction through real and numerical experiments, ESMC Galway, E. Hohnadel, J. Marthelot, I. Andrade-Silva, T. Métivet, O. Pouliquen, F. Bertails-Descoubes (speakers underlined)

Teaching

- September 2023- Automata and languages, UGA
 - January 2024 L2 tutorial classes
- September 2021 Automata and languages, UGA
 - January 2022 L2 tutorial classes