

Thibault Cimic

HPC Research Engineer in Applied mathematics

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Experiences

- 2023-2024-08 **HPC Research Engineer**, *LGL, Digiteo, CEA, Saclay*
Parallelization of an optimized high order polynomial finite element propagation wave solver called Ondo.
- 2018-2021-09 **PhD Student in Applied Mathematics in Team ALPINES**, INRIA, Paris 12ième
Construction of a 2-lvl preconditioner for the map-making problem in Cosmology and acceleration of linear solvers for large sparse linear systems with Enlarged CG.
- 2018-2020-09 **Teaching Assistant**, Sorbonne Université - UPMC, Paris 5ième
Finite Element in Python, Solving linear system in C++, ODE in Python

Education

- 2016-2018 **Research Master in Mathematics**, *France, Paris, Université Pierre et Marie Curie, 75005*,
Laboratoire Jacques-Louis Lions
 - Functional analysis, Finite Element implementation, Optimisation, Spectral Theory, Control Theory
- 2016 **Bachelor's Degree in Mathematics**, *France, Paris, Sorbonne Universités, Université Pierre et Marie Curie, 75005*
- 2012 **Highschool Degree**, *France, Dammarie-lès-lys, 77190*

Conferences and Presentations

- 2020 **SIAM PP20**, *Seattle, USA*, Presentation of construction of fully algebraic 2-level preconditioner for the map making problem in CMB data analysis in astrophysics
- 2020 **NAHCPS**, *London, UK*, Enlarged Conjugate Gradient (ECG) techniques on a large sparse linear system from the map-making problem in Cosmology
- 2019 **Modelling**, *Czech Republic, Olomouc*, Presentation of new results of Enlarged Krylov Methods and description of first ideas of domain decomposition methods in a fully algebraic framework
- 2019 **NLAFET**, *England, Oxford*, Presentation of continuity of work beyond the NLAFET project

Coding tools

Confirmed level: C++, Python, LaTeX, Bash, Markdown
Medium level: C, Julia, Fortran, Git

Projects

Lina : Linear Algebra package in C++
ECG : Enlarged Conjugate Gradient package in C++

Languages

French Mother tongue
English Fluent
Italian Beginner/B2

Sport Events

- September 18th 2022 **Triathlon Finisher**, *Lac de Madine, 55210 Nonsard-Lamarche*, Finisher of the triathlon 1.5K-40K-10K, chrono 3h04min, organised by LightOnTri
- August 28th 2022 **Duathlon Finisher**, *Chantilly, 60500, France*, Finisher of the Chantilly Castle Duathlon 6K-45K-10K, chrono 3h24min, organised by Castle Race Series