

Maxime Stauffert

Tél. : 06 76 95 85 33

E-mail : contact@maxime-stauffert.fr

Web site : maxime-stauffert.fr

Born December, 22nd 1990, in Grenoble, France.

Actual position :

2018 - : Post-doctoral position at Inria Sophia Antipolis Méditerranée, team ACUMES.
Supervisor : Régis Duvigneau.

Education :

2015 - 2018 : PhD in applied Mathematics of Université Paris Saclay.
Supervision : Christophe Chalons (supervisor) and Samuel Kokh (co-supervisor).
Laboratories : LMV, UVSQ and Maison de la Simulation, CEA Saclay.
Subject : "Numerical simulation of compressible complex flows by Lagrange-projection methods: application to shallow water equations".
Defense : 5 October 2018.

Jury :	Christophe Berthon	(U. de Nantes)	Rapporteur
	Christophe Chalons	(UVSQ)	Thesis supervisor
	Stéphane Clain	(U. do Minho)	Rapporteur
	Anaïs Crestetto	(U. de Nantes)	Examiner
	Samuel Kokh	(CEA Saclay)	Thesis co-supervisor
	Raphaël Loubère	(U. de Bordeaux)	Jury president
	Pascal Tremblin	(CEA Saclay)	Examiner
	Marie-Hélène Vignal	(U. de Toulouse)	Examiner

2014 - 2015 : Master of Science in Modeling and Simulation (M2S), ENS Cachan.

July 2014 : Passed the Agrégation exam in Mathematics (rank : 52nd).

July 2013 : Accepted in ENS Rennes.

2011 - 2013 : Bachelor in Mathematics at ENS Cachan.

2008 - 2011 : Classes Préparatoires aux Grandes Écoles (CPGE), Lycée Champollion, Grenoble.

June 2008 : Maths and Sciences Baccalaureate with honours.

Publications :

- [1] Christophe Chalons, Pierre Kestener, Samuel Kokh, and Maxime Stauffert. A large time-step and well-balanced Lagrange-Projection type scheme for the shallow-water equations. *Communication in Mathematical Sciences*, 15(3):765–788, 2017.
- [2] Christophe Chalons, Samuel Kokh, and Maxime Stauffert. An all-regime and well balanced Lagrange-Projection like scheme for the shallow-water equations on unstructured meshes. <https://hal.archives-ouvertes.fr/hal-02004835>, 2019.
- [3] Christophe Chalons and Maxime Stauffert. *A High-Order Discontinuous Galerkin Lagrange-Projection Scheme for the Barotropic Euler Equations*, pages 63–70. Springer International Publishing, Cham, 2017.
- [4] Christophe Chalons and Maxime Stauffert. A well-balanced Discontinuous-Galerkin Lagrange-Projection scheme for the shallow-water equations. <https://hal.archives-ouvertes.fr/hal-01612292>, 2017.

Conference talks :

- May 2018** : CANUM (NUMerical Analysis National Congress). Cap d'Agde, France.
- November 2017** : Low Mach workshop. Toulouse, France.
- June 2017** : FVCA8 (Finite Volumes for Complex Applications). Lille, France.
- May 2017** : Purple SHARK-FV (Sharing Higher-order Advanced Know-how on Finite Volume). Ofir, Portugal.
- May 2016** : Great white SHARK-FV. São Félix, Portugal.

Teaching activities :

- 2016 - 2018** : Tutorials (2×64 hours) in general Mathematics in first year at UVSQ, Versailles.
- 2015 - 2016** : Practical work (64 hours) in Maple and Matlab in first year at ISTY, Vélizy.
- 2014 - 2015** : Tutor (2h/sem.) in Mathematics in CPGE at Lycée Blaise Pascal, Orsay.

Internships :

- March to August 2015** : Supervisor : Florent Renac.
Place : ONERA, Châtillon.
Subject : "Numerical simulation of high order low Mach flows by Lagrange-Projection methods".
- March to August 2013** : Supervisor : Grégoire Pichenot.
Place : INES, CEA Grenoble.
Subject : "Simulation of a photovoltaic system dedicated to a solar dirigible balloon".
- February to June 2012** : Supervisor : Nicolas Vayatis.
Place : CMLA, ENS Cachan.
Subject : "Active experimental design for tsunami modeling".

Languages and coding :

- Languages** : French (native) and English (fluent), TOEIC (955 points/990).
- Coding** : Good knowledge of : C/C++, Fortran, GLVis, Gmsh, Latex, Maple, Matlab, Microsoft office, OpenMPI, Paraview, Python and Scilab.

Seminars organization :

- May 2018** : Member of CANUM organizing team.
- 2016 - 2017** : Seminar of Modeling (monthly), Maison de la Simulation.
- 2015 - 2016** : Informal seminars of Maison de la Simulation (bi-monthly).