

PIERRE-LOÏK ROTHÉ

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PHD STUDENT AT CERMICS/LABORATOIRE NAVIER

EDUCATION

PhD Student CERMICS/Laboratoire Navier , Supervisor : Frédéric LEGOLL, (2016-)

MS in Numerical Analysis (ANEDP) Université Paris VI (2015-2016)

École Nationale des Ponts et Chaussées Champs sur Marne, specialization in Mathematics (2012-2016)

Preparation for competitive exams Lycée du Parc (2009-2012)

Baccalauréat S Magna cum laude, Lycée de la Plaine de l'Ain (2006-2009)

PROFESSIONAL EXPERIENCE

Intern, Research MS CERMICS, Ecole des Ponts ParisTech · Champs sur Marne · 2/2016-8/2016

Variance reduction in **stochastic homogenization** and study of fluctuations. **Implementation** of variance reduction methods (in Freefem++). **Theoretical analysis and numerical applications** to compute fluctuations.

Intern, Engineering CNR (Compagnie Nationale du Rhône) · Lyon · 02/2015 – 08/2015

Review and **creation of a new process** to calibrate a numerical model used to compute the water level in rivers. **Implementation of a numerical tool** to help the calibration process (developed in python). The tool uses **optimization routines** to fit calibration to experimental data.

Intern, Research IRSTEA · Villeurbanne · 08/2014 – 02/2015

Development of an uncertainty quantification black box tool on a numerical code used to compute water level in rivers.

Intern, Research IH Cantabria · Santander, Spain · 04/2013 – 07/2013

assistant engineer in numeric modelisation and simulation on the coastal risks linked to tsunamis. Review on fluid mechanics and numerical engineering. **Improvement and optimization of a numerical model** approximating the tsunamis run-up.

SKILLS

Languages

French: mother tongue

English: fluent (TOEIC exam in 2013 score 950 on 990)

Spanish: Professional proficiency

Computer skills

OS Ubuntu, Mac, Windows

Languages Python, C++, Freefem++, R, Fortran, VBA, Matlab, Maple

ATTENDED CONFERENCES

SciCADE 2017

International Conference on Scientific Computation and Differential Equations · Bath, UK · 09/11/2017 - 09/15/2017

USNCCM14

14th U.S. National Congress on Computational Mechanics · Montreal, Canada · 07/17/2017 - 07/20/2017

Congrès SMAI 2017

Société de Mathématiques Appliquées et Industrielles · La Tremblade · 06/05/2017 - 06/09/2017

Winter School on Numerical Analysis of Multiscale Problems

Hausdorff Research Institute for Mathematics (HIM) · Bonn, Germany · 01/09/2017 - 01/13/2017

Recent developments in numerical methods for model reduction

IHP (Institut Henri Poincaré) · Paris · 11/07/2016 - 11/10/2016