
Training

- 2018 **PhD in Applied Mathematics**, *Jean Kuntzmann Laboratory, Université Grenoble-Alpes*.
“Mathematical study of the air-sea coupling problem including turbulent scale effects.”
Supervised by Pr. E. Blayo (Univ. Grenoble-Alpes) and Dr. F. Lemarié (Inria Research Scientist). Defended February 15th, 2018. Inria grant.
- 2014 **Masters of Science in “Numerical modelling and simulation”**, *ENSTA ParisTech and Université de Versailles Saint-Quentin-en-Yvelines*.
Received with honors.

Experience

- 2015 – 2017 **Teaching assistant**. *University of Grenoble-Alpes, Grenoble, France*.
Received 74h+ hours of pedagogical training.
Taught 128+ hours of recitations in mathematics (real analysis, numerical methods, statistics) to groups of ~30 students in 3rd year of bachelor’s degree.
- 2016 **DCMIP summer school participant**. *NCAR, Boulder, Colorado, USA*.
Received training on weather and climate numerical model development.
Handled and compared different models on standardized testcases.
- 2014 **Research Intern**. *Radioprotection and Nuclear Safety Institute, Fontenay-aux-Roses, France*.
Contributed to the development of a numerical code simulating water-hydrogen flow in heterogeneous porous media.

Publications

- Articles C. Pelletier, F. Lemarié, J. L. Redelsperger and E. Blayo (in preparation). Impact of comprehensive surface layer parameterization schemes including viscous and oceanic contributions on turbulent air-sea fluxes.
C. Pelletier, F. Lemarié and E. Blayo (2018). Sensitivity analysis and metamodels for the bulk parameterization of turbulent air-sea fluxes. *Quarterly Journal of the Royal Meteorological Society*. DOI: [10.1002/qj.3233](https://doi.org/10.1002/qj.3233), [hal-01663668](https://hal.archives-ouvertes.fr/hal-01663668)
- Conference with proceedings C. Pelletier, F. Lemarié and E. Blayo (2017). A theoretical study of a simplified air-sea coupling problem including turbulent parameterizations. *Coupled Problems in Science and Engineering VII*. [hal-01659443](https://hal.archives-ouvertes.fr/hal-01659443)
- Conferences *Atmosphere Modelling Workshop 2017*. Météo France (Toulouse, France).
SMAI 2016. French Applied Mathematics Society (Obernai, France).

Extracurricular activities

- 2015 – 2017 **Non-permanent researcher representative**. *Lab. J. Kuntzmann council*.
Reinstated a regular non-permanent researcher seminar.
Acted as liaison between PhD students and head of laboratory.
- 2015–2017 **Volunteering**. *Science day*.
Created experiments for children to apprehend weather-related mathematical concepts.

Skills

- Computer **UNIX. Programming:** *C/C++, FORTRAN, python, Matlab, Bash*. **Data manipulation:** *NetCDF*. **Parallel computing:** *MPI*. **Typesetting:** \LaTeX .
- Languages **French:** *mother tongue*. **English:** *fluent, TOEIC: 960/990*. **Russian:** *intermediate, B1 level*.