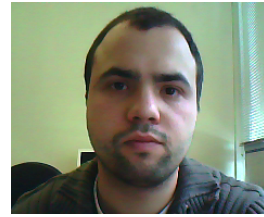


Raphael DUSSIN



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Personal

Date and place of Birth : April 16th, 1981, Rennes, France
Citizenship : French
Marital Status : single

Training and Work

- 2010–2012** : Research engineer in MEOM (MultiscalE Ocean Modeling) team in LEGI (Grenoble, France), supervised by Bernard Barrier. *Drakkar consortium, Ocean Modeling with NEMO Ocean General Circulation Model, preparation of atmospheric forcing fields, run numerous coarse to high resolution simulations, analysis of the results, development on a wide range of tools (visualization, data processing,...)* .
- 2008–2010** : Research engineer at LPO (Laboratory of Physical Oceanography, Brest, France), supervised by Anne-Marie Treguier. *Drakkar consortium, Ocean Modeling with NEMO Ocean General Circulation Model, run several high resolution simulations, analysis of the results, development on post-processing tools.*
- 2004–2008** : Research engineer at LPO (Laboratory of Physical Oceanography, Brest, France), supervised by Alain Colin de Verdière. *Rotating tank experiments, including design and data analysis. Numerical modeling with idealized numerical models (QG, MICOM)*
- 2003–2004** : DEA Oceanologie, Meteorologie et Environnement (french MSc in ocean science) in Université de Bretagne Occidentale, Brest, France. *Geophysical Fluid Dynamics, Computational Fluid Dynamics, Meteorology, Biogeochemistry, Master thesis on Rotating and Convective instabilities.*
- 1999–2003** : Maitrise de Physique in Université de Bretagne Occidentale, Brest, France. *Theoretical Physics (Quantum Physics, Electromagnetism, Fluid Dynamics,...) Master thesis on Data analysis from the OVIDE 2002 cruise.*

Publications

- 2012** : Treguier, A.M., Ferron, B., Dussin, R., 2012 : Buoyancy-driven currents in eddying ocean models. In "*Buoyancy-Driven Flows*", Chassignet, E.P., C. Cenedese, and J. Verron, (Eds.), Cambridge University Press, 281-311.
- 2012** : Treguier, A.M. et al., *Eddy contributions to the meridional transport of salt in the North Atlantic*, J. Geophys. Res. vol 117.
- 2012** : Zika, J.D. et al., *Vertical Eddy Fluxes in the Southern Ocean*, submitted to JPO

Communications as first author

- 2007** : Poster and proceeding *Comparison of lab experiments and numerical simulations on the behavior of source flows* for Congres Francais de Mecanique in Grenoble, France.
- 2008** : Proceeding *Effets de la Stratification Oceanique sur les Instabilites Rotatives* for 14eme Colloque National de la Recherche en IUT.
- 2008** : Poster *Preliminary Results on a North Atlantic 1/12° model simulation* at MERCATOR/CORIOLIS workshop in Toulouse, France.
- 2009** : Presentation *Results on the NATL12-BAMT20 Simulation* at DRAKKAR meeting in Grenoble, France.
- 2009** : Poster *Mediterranean Waters outflow in a North Atlantic 1/12° model simulation* at MERCATOR/CORIOLIS workshop in Brest, France.
- 2010** : Presentation *The North Atlantic Current and Deep Oveflows in NATL12 and ORCA12* at DRAKKAR meeting in Grenoble, France.
- 2010** : Poster *Impact of vertical resolution in an eddy-permitting Ocean Global Circulation Model forced with ERA-Interim.* at MyOcean Days in Toulouse, France.
- 2010** : Poster *Sensitivity experiments with the global configuration ORCA025* at MERCATOR/CORIOLIS workshop in Toulouse, France.
- 2011** : Presentation *Sensitivity of ORCA025 to the vertical grid resolution, salinity restoring, and forcing* at DRAKKAR meeting in Grenoble, France.
- 2011** : Poster *Impact of vertical resolution in an eddy-permitting Ocean Global Circulation Model forced with ERA-Interim.* at EGU in Vienna, Austria.
- 2011** : Poster *Preparation of an ERA-interim based forcing set* at MERCATOR/CORIOLIS workshop in Toulouse, France.

Teaching

- Teaching assistant in Fluid Dynamics (including lab experiments) in MSc of Physics and continuous media, at U.B.O.
- Teaching assistant in Physics for 1st year undergraduates (for 2 years, 120 hours total), at U.B.O.

Experience with Computer Sciences

- **Fortran90** : 7 years of experience, external libraries (mostly netcdf), my choice for costly computations
- **Shell** : korn and bourne again shells, lot of scripts written (from data treatment to simulation handling on supercomputer)
- **Parallel computing** : vector and scalar architectures, familiar with MPI, openMP and GPGPU
- **Python** : 3 years of experience, developed my own packages, my choice for light computations and visualization
- **Matlab** : 6 years of experience, before switching to python
- **OS** : Unix/Linux, Mac OsX
- **Reports/Presentations** : LaTeX (including beamer), Keynote, OpenOffice

Languages

- **French** : Mother tongue
- **English** : Good (Oral and written scientific communications)
- **Spanish** : Good

References

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