

## Caroline Muller

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CONTACT INFORMATION	Laboratoire de Météorologie Dynamique (LMD) École Normale Supérieure (ENS) 24 rue Lhomond 75005 Paris France	06 50 13 56 40 muller@lmd.ens.fr
RESEARCH TOPICS	Hydrological cycle (mean and extreme precipitation), spatial organization of tropical clouds, cyclogenesis, ocean circulation, internal waves.	
RESEARCH EXPERIENCE	<p>2016 - present <b>Laboratoire de Météorologie Dynamique (LMD), École Normale Supérieure (ENS)</b> CNRS researcher <i>Chargée de Recherche</i> &amp; ENS lecturer <i>Maître de Conférence attachée à l'ENS</i></p> <p>2012 - 2016 <b>Laboratoire d'Hydrodynamique de l'X (LadHyX), École Polytechnique</b> CNRS researcher <i>Chargée de Recherche</i></p> <p>2010 - 2012 <b>Princeton University/GFDL, Program in Atmospheric and Oceanic Sciences</b> Associate Research Scholar, with Isaac Held</p> <p>2008 - 2010 <b>Massachusetts Institute of Technology (MIT), Dept. of Earth, Atmospheric, and Planetary Sciences</b> Postdoctoral Associate, with Paul O'Gorman</p> <p>2003 - 2008 <b>New York University (NYU), Courant Institute of Mathematical Sciences</b> Ph.D. research, with Oliver Bühler</p> <p>Summers of 2004, 2005 and 2006 <b>NASA Goddard Institute for Space Studies</b> Summer internships, with Vittorio Canuto and Armando Howard</p> <p>2001 - 2002 <b>Georgia Institute of Technology, Aerospace Engineering Dept</b> Masters research, with Panagiotis Tsiotras</p>	
EDUCATION	<p><b>Courant Institute of Mathematical Sciences, New York University (NYU)</b> Ph.D. in Applied Mathematics, May 2008 M.S. in Mathematics, May 2005</p> <ul style="list-style-type: none"><li>• Dissertation Topic: Wave-induced mixing in the abyssal ocean</li><li>• Advisor: Oliver Bühler</li></ul> <p><b>Georgia Institute of Technology</b> M.S. in Aerospace Engineering, March 2003 - selective dual degree program with Supaéro</p> <ul style="list-style-type: none"><li>• Master's thesis topic: A wavelet method for solving optimal control problems</li><li>• Advisor: Panagiotis Tsiotras</li></ul> <p><b>Supaéro, École Nationale Supérieure de l'Aéronautique et de l'Espace, France</b> Engineering degree, March 2003</p> <ul style="list-style-type: none"><li>• Ranked first on the competitive entrance exam for Supaéro Mathematics major</li></ul>	

HONORS AND AWARDS	2009	Geophysical Research Letter publication selected to be an editor's highlight
	2007	Sandra Bleistein Prize for notable achievement in applied mathematics Courant Institute of Mathematical Sciences
	2007	Best Poster Presentation Award AMS 16 <sup>th</sup> Conference on Atmospheric and Oceanic Fluid Dynamics
	2007	Nominated for Outstanding Teaching Award New York University College of Arts and Sciences
	2003 - 2008	Henry MacCracken Fellowship New York University Graduate School of Arts and Sciences
	1999	Ranked first on the competitive entrance exam Mathematics major Supaéro, École Nationale Supérieure de l'Aéronautique et de l'Espace
	ADMINISTRATION	2013 - present
2016 - present		Member of the Comité de Laboratoire, LMD
2015		Co-organized the "NewWave" conference on internal waves <a href="http://newwave.sciencesconf.org">newwave.sciencesconf.org</a>
2010 - 2012		Organized the "climate dynamics seminar" GFDL/Princeton University
2008 - 2010		Created and ran a "journal club" to discuss papers in climate science EAPS, MIT
TEACHING EXPERIENCE	Spring 2017	Lecturer, <i>Clouds and atmospheric convection</i> , L3, ENS Paris
	Fall 2016	Lecturer, <i>Linear Algebra</i> , L3, ENS Paris
	Fall 2016	Lecturer, <i>Meteorology</i> , Master 1, ENS Paris
	Fall 2016	Lecturer, <i>Clouds and Climate</i> , FDSE Summer School, Cambridge
	Spring 2016	Lecturer, <i>Calculus</i> , NYU Shanghai
	Fall 2015	Lecturer, <i>Linear Algebra</i> , L3, ENS Paris
	Fall 2015	Lecturer, <i>Meteorology</i> , Master 1, ENS Paris
	Fall 2015	Lecturer, <i>Numerical methods for fluids</i> , FDSE Summer School, École Polytechnique
	Spring 2015	Teaching Assistant, <i>Fluid Dynamics</i> (MF101), ENSTA
	Fall 2014	Teaching Assistant, <i>Turbulence</i> , Master 2, École Polytechnique
	Fall 2014	Lecturer, <i>Clouds and Climate</i> , FDSE Summer School, Cambridge
	Spring 2014	Teaching Assistant, <i>Fluid Dynamics</i> (MF101&102), ENSTA
	Fall 2013	Lecturer, <i>Physical Oceanography</i> (MF202), ENSTA
	Fall 2013	Lecturer, <i>Numerical methods for fluids</i> , FDSE Summer School (fdse.org), École Polytechnique
	Spring 2013	Teaching Assistant, <i>Fluid Dynamics</i> (MF102), ENSTA
	Spring 2008	Lecturer, <i>Calculus II</i> , NYU
	Spring 2007	Lecturer, <i>Calculus III</i> , NYU
	Fall 2006	Lecturer, <i>Calculus II</i> , NYU
	Spring 2006	Lecturer, <i>PreCalculus</i> , NYU
	Fall 2005	Lecturer, <i>Calculus II</i> , NYU
Spring 2005	Teaching Assistant, <i>Quantitative Reasoning</i> , NYU	
Fall 2004	Teaching Assistant, <i>Quantitative Reasoning</i> , NYU	
Fall 2003	Teaching Assistant, <i>Business Calculus</i> , NYU	
OTHER ACTIVITIES	Guitar, Climbing, Volleyball, WxChallenge with the MIT team (the North American collegiate weather forecasting competition)	