

## Emmanuel Dormy

---

*Ecole Normale Supérieure*  
*Department of Mathematics & Applications*  
*45, rue d'Ulm*  
*75005 Paris*  
*France*

born december 22, 1970  
phone: 01 44 32 32 91  
e-mail: dormy@math.ens.fr

### Research

- 2016-now* ENS Department of Mathematics and its Applications, CNRS advanced researcher.
- 2008-2016* **Advanced researcher** (Directeur de Recherche) at the CNRS (Centre National de la Recherche Scientifique), working at the ENS Physics Department.
- 2006* Initiated an interdisciplinary group (Physics, Astrophysics, Geophysics) at Ecole Normale Supérieure (ENS) Physics Department, jointly with the IPGP (UMR7154), on Magneto-hydrodynamics in Astrophysics and Geophysics.
- 2004-2005* Working for two years in the Statistical Physics group at ENS Physics Department.
- 2002* **Habilitation à Diriger des Recherches** (higher doctorate), University Paris VII.
- 1999* **Junior researcher** (Chargé de recherche, 1<sup>e</sup> cl.) at the CNRS, working at IPGP (Institut de Physique du Globe de Paris).
- 1997-1998* Post-Doctoral researches at the University of California Los Angeles (UCLA, USA).
- Nov. 1997* **PhD** in Geophysics, with honors at IPG in Paris (France).
- Juin 1994* **Masters** (DEA) in Mathematics, with honors, Nice Sophia-Antipolis University (France).

### Teaching

- 2017-now* Professor of the course on “Dynamics and Modelling” at ENS (opened to Mathematics and Physics students).
- 2008-now* Associate Professor at Ecole Polytechnique (Professeur Chargé de Cours).
- 2008-now* Professor of the course on “Computational Physics” at Ecole Normale Supérieure. Became “Numerical Approaches for PDEs” opened to Physics and Mathematics students.
- 2004-2008* Assistant Lecturer (Tutorat) in Fluid Mechanics at ESPCI.

### Former students

- 2013-2016* Advisor for the PhD thesis of Florence Marcotte, geophysics. Defended on november 16, 2016.
- 2013-2014* Advisor for the post-doctoral work of Fernando Garcia (12 months, mathematics).
- 2012-2015* Advisor for the PhD thesis of Raphaël Raynaud, astrophysics, co-advised with Ludovic Petitdemange. Defended on june 26, 2015.
- 2010-2013* Advisor for the PhD thesis of Isamël Bouya, mathematics, co-advised with David Gérard-Varet. Defended on june 10, 2013.
- 2009-2011* Advisor for the post-doctoral work of Martin Schrunner (24 months, astrophysics).
- 2009-2010* Advisor for the post-doctoral work Wietze Herreman (12 months, geophysics).
- 2006-2009* Advisor for the PhD thesis of Ludovic Petitdemange, astrophysics, co-advised with Steven Balbus. Defended on december 11, 2009.

- 2006-2009 Advisor for the PhD thesis of Christophe Gissinger, physics, co-advised with Stephan Fauve. Defended on november 9, 2009.
- 2006-2009 Advisor for the PhD thesis of Laure Goudard, geophysics. Defended on june 19, 2009.
- 2003-2004 Advisor for the post-doctoral work of Alexey Iskakov (15 months, geophysics).
- 2002-2005 Advisor for the PhD thesis of Vincent Morin, geophysics. Defended on december 15, 2005. Vincent Morin, PhD student 2002-2005.
- 2003 Advisor for Christopher Finlay (then PhD student in Leeds) European “Marie Curie” fellowship in Paris, 3 months.

### **Service to Profession**

- 2020 Organiser of a 3 month programme at the Isaac Newton Institute (INI) in Cambridge. Principal organiser of the first Workshop during this programme.
- 2018-... Head of the *Analysis* team of the DMA-ENS.
- 2017-... Member of the editorial committee of *Geophys. Astrophys. Fluid Dyn.*
- 2017-... Member of the scientific council of GDRI-Dynamo.
- 2014-... Deputy-president of the MesoPSL computing center committee (PSL, Paris).
- 2013-... Expert for the french Ministry of Research.
- 2011-2016 Creator and coordinator of the European Research Network (GDRE) on Dynamo (<http://mhd.ens.fr/GDRE>), organised yearly conference over that period.
- Sept. 2010 Organised with D. Hughes and S. Tobias an international Workshop at IESC.
- Sept. 2009 Organised with M. Proctor (Cambridge) the first “Anglo-French conference on Dynamo Theory” at the University of Cambridge U.K.
- 2009 Organised with S. Fauve and F. Pétrélis a 3 months programme at the Inst. Henri Poincaré (IHP) in Paris.
- 2008-2010 Organiser of the General Physics Colloquium at the Ecole Normale Supérieure.
- 2007-2010 Director of the french GdR-Dynamo (GDR2060).
- 2006 Organised with M. Núñez a session at the AIMS.
- 2003 Organised the international conference “Mathematical Aspects of Natural Dynamos” in Caramulo (Portugal).
- 2001 & 2002 Organised the “Earth core” session at the European Geophysical Society.

### **Invited Conferences**

- Nov. 2017 *PHR2017*, Royal Astronomical Society, Londres, U.K.
- Apr. 2016 *IUTAM Symp. Helicity, structures and singularity in fluid and plasma dynamics*, Italy.
- Dec. 2015 *Princeton Center for Theoretical Science*, Princeton, U.S.A.
- Oct. 2015 *5<sup>th</sup> conference on Magnetic Field in the Universe*, France.
- Oct. 2014 *Workshop on Geophysical and Astrophysical Turbulence*, Inst. of Pure and Applied Math. (IPAM) UCLA, USA.
- Dec. 2013 *American Geophysical Union*, AGU Fall Meeting, San Francisco, U.S.A.
- Nov. 2013 *RIMS Int. Conf. on Zonal Flows in Geophysical and Astrophysical Fluids*, Kyoto, Japan.
- Aug. 2012 *International Astronomical Union*, IAU XXVIII General Assembly, Beijing, China.
- May 2011 *Princeton Center for Theoretical Science*, Princeton, U.S.A.
- Aug. 2010 *American Geophysical Union*, AGU Meeting of the Americas, Iguazu, Brésil.
- June 2010 *European Physical Society*, EPS 37<sup>th</sup> Conf. Plasma Physics, Dublin, Irlande.
- Dec. 2009 *Conf. on Magnetohydrodynamic Turbulence*, Indian Inst. of Technology, Kanpur, India.
- May 2009 *Workshop Waves and instabilities in geophys. and astrophys. flows*, France.
- May 2008 *Workshop Modelling geophysical systems by statistical mechanics methods*, Erice, Italy.
- June 2007 *Astronom, Int. Conf. on Numerical Modeling of Space Plasma Flows, 2007*, Paris, France.
- June 2005 *Collège de France*, Conférence invitée, Séminaires de Mathématiques appliquées, chaire du Pr. Pierre-Louis Lions.

### **Prizes and honors**

- 2018 *Visiting Fellow*, Trinity College, Cambridge (3 months).
- 2009 *La Recherche* prize, received jointly with D. Gérard-Varet, B. Desjardins, D. Bresch, E. Grenier.
- 2000 *Doornbos Memorial Prize*, given by the SEDI committee of SEDI (Study of the Earth's Deep Interior) of the IAGA (International Union of Geodesy and Geophysics).
- 1997 Lavoisier grant from the french Ministry of Foreign Office.