

# PUBLICATIONS

1971-2018

*Last update : November 2018*

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*Marie Farge, DRI CNRS  
LMD-IPSL, ENS Paris, PSL  
INSMI, section 41*

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*All articles can be downloaded from  
<http://wavelets.ens.fr> in **Publications***

*Articles are numbered from the first one published in 1971.*

*Color code :*

- R Articles published in peer-reviewed journals (R for 'Référés')*
  - C Articles published in peer-reviewed proceedings (C for 'Conférences')*
  - O Articles published in books (O for 'Ouvrages')*
  - D Other articles (D for 'Divers')*
- 

## 2018

413-C131

Marie Farge and Jean Gasnault, 2018

Towards Open Science and Open Doctrine. The principles and laws that promote the sharing of knowledge, and how they are implemented

*International Conference LVI-2018 'Knowledge of the law in the big data age',  
Florence (Italy), October 11-12 2018*

412-R104

Natacha Nguyen van yen, Mathias Waidmann, Rupert Klein,  
Marie Farge and Kai Schneider, 2018

Energy dissipation caused by boundary layer instability  
at vanishing viscosity

*J. Fluid Mech.*, 849, 676-717

*arXiv: 1706.00942*

411-D136

Kai Schneider, Rodrigo Pereira, Natacha Nguyen van yen and Marie Farge, 2018  
Dissipation in adaptive wavelet Galerkin discretizations  
*Bulletin of the American Physical Society* **63**(13), 478

410-R104

Marie Farge and Frédéric Hélein, 2018  
Is the system of scientific publications on the eve of a revolution?  
And, if so, towards what?  
*European Mathematical Society Newsletter*, **6**(108), 35-40

409-C130

Natacha Nguyen van yen, Mathias Waidmann, Marie Farge, Kai Schneider and Rupert Klein, 2018  
Production of dissipative vortices by solid bodies in incompressible fluid flows: comparison between Prandtl, Navier-Stokes and Euler solutions  
*Proceedings of the International Congress of Mathematicians, Rio de Janeiro (Brésil), 1-9 August 2018*

408-R103

Thomas Engels, Dmitry Kolomenskiy, Kai Schneider, Marie Farge, Fritz-Olaf Lehmann and Joern Sesterhenn, 2018  
The impact of turbulence on flying insects in tethered and free flight: high-resolution numerical experiments  
*Phys. Rev. Fluids*, in press

407-C129

Naoya Okamoto, Marie Farge, Kai Schneider and Katsunori Yoshimatsu, 2018  
Wavelet regularization of the three-dimensional incompressible Euler equations  
*Proceedings of the 12th European Fluid Mechanics Conference, Vienna (Austria), 9-13 September 2018*

406-D135

Marie Farge et Frédéric Hélein, 2018  
Transition vers l'Accès Libre: le piège des accords globaux avec les éditeurs  
*Mediapart*, 13 Avril 2018

405-C128

Marie Farge, Naoya Okamoto, Katsunori Yoshimatsu and Kai Schneider, 2018  
Wavelet regularization of the three-dimensional incompressible Euler equations  
*Proceedings of the 12<sup>th</sup> European Fluid Mechanics Conference, Vienna (Austria), 9-13 September 2018*

404-D134

Thomas Engels, Dmitry Kolomenskiy, Kai Schneider, Marie

Farge, Fritz-Olaf Lehmann and Joern Sesterhenn, 2018  
Insects in tethered and free flight: the impact of turbulent inflow  
*Bulletin of the American Physical Society* **63**(13), 533

403-R102

Thomas Engels, Dmitry Kolomenskiy, Kai Schneider, Marie Farge, Fritz-Olaf Lehmann and Joern Sesterhenn, 2018  
Helical vortices generated by flapping wings of bumblebees  
*Fluid Dyn. Res.*, **50**(1), 011419 (21 pages)  
*arXiv: 1803.07330*

**2017**

402-C127

Frank Jacobitz, Kai Schneider and Marie Farge, 2017  
On the scale-dependent helicity in stably stratified turbulent shear flows  
*Proceedings of the Pacific Division of AAAS, TCM2017, Waimea, Hawaii Island (USA), 19-23 June 2017*, 63

401-R101

Marie Farge, Naoya Okamoto, Kai Schneider and Katsunori Yoshimatsu, 2017  
Wavelet-based regularization of the Galerkin truncated three-dimensional incompressible Euler flows  
*Phys. Rev. E*, **96** (6), 063119 (9 pages)  
<https://doi.org/10.1103/PhysRevE.96.063119>  
*arXiv: 1711.04017*

400-C126

Marie Farge, Naoya Okamoto, Katsunori Yoshimatsu and Kai Schneider, 2017  
Wavelet regularization of 3d incompressible Euler flows  
*16th European Turbulence Conference, 21-24 August 2017, Stockholm (Sweden)*, 29422

399-D133

Thomas Engels, Dmitry Kolomenskiy, Kai Schneider, Marie Farge, Fritz-Olaf Lehmann and Joern Sesterhenn, 2017  
Massively parallel free-flight simulations of a passive bumblebee in turbulence  
*Bulletin of the American Physical Society* **62**(14), 413

398-C125

Benjamin Kadoch, Maxime Bassenne, Mahdi Esmaily-Moghadam, Kai Schneider, Marie Farge and Wouter Bos, 2017  
Multi-scale geometrical Lagrangian statistics: Extensions and applications to particle-laden turbulent flows  
*Center for Turbulence Research, Proceedings of the Summer*

*Program 2016, Stanford University (USA), 53-62*

397-O42

Marie Farge, 2017

Scholarly publishing and peer-reviewing in open access

*Europe's Future: Open Science, Open Innovation,*

*and Open to the World*

*Book edited by Carlos Moedas, the European Commissioner for Research, Science and Innovation,*

*and published by the European Commission, 73-82*

396-C124

Henja Wehmann, Thomas Engels, Kai Schneider, Marie Farge, Joern Sesterhenn and Fritz-Olaf Lehmann, 2017

Corrugation alters aerodynamic performance in flapping insect wings

*110th Annual Conference of the German Zoological Society*

*(DZG), 12-15 September 2017, Bielefeld University (Germany)*

395-D132

Thomas Engels, Dmitry Kolomenskiy, Kai Schneider,

Marie Farge, Fritz-Olof Lehmann and Joern Sesterhenn, 2017

Bumblebee flight in turbulence: high resolution numerical simulations

*Movie for the Gallery of Fluid motion, 70th Annual Conference, Division of Fluid Dynamics, American Physical Society, Denver (USA), 19-21 November 2017*

394-C123

Romain Nguyen van yen, Marie Farge, Kai Schneider,

Mathias Waidmann and Rupert Klein, 2017

Energy dissipation caused by boundary layer instability at vanishing viscosity

*16th European Turbulence Conference, 21-24 August 2017, Stockholm (Sweden), 29420*

393-O41

Marie Farge et Patricia Mirabile, 2017

Publications scientifiques: changer les pratiques

*'Maths et Langage', ouvrage collectif publié à 10 000 exemplaires par le CIJM (Comité International des Jeux Mathématiques) et offert gratuitement lors du 18ième 'Salon de la Culture Mathématique', 87-92, pour télécharger l'ouvrage*

*<http://www.cijm.org/images/documents/90/Maths%20Langages%20express.pdf>*

392-C122

Bryan He, Sourabh Apte, Kai Schneider, Benjamin Kadoch and Marie Farge, 2017

Turbulence and inertial effects in a porous bed:

DNS and flow analysis  
*Center for Turbulence Research, Proceedings of the Summer Program 2016, Stanford University (USA), 63-72*

391-D131

Marie Farge, 2017

RISE report on publishing and peer-reviewing in open access  
*Written for the European Commission as member of the RISE (Research, Innovation and Science Experts) working group, 1-39*

390-C121

Naoya Okamoto, Marie Farge, Kai Schneider  
and Katsunori Yoshimatsu, 2017

Wavelet regularisation of three-dimensional incompressible Euler flows  
*Proceedings of the Pacific Division of AAAS, TCM2017, Waimea, Hawaii Island (USA), 19-23 June 2017, 72*

389-R100

Teluo Sakurai, Katsunori Yoshimatsu, Kai Schneider, Marie Farge, Koji Morishita, Takashi Ishihara, 2017

Coherent structure extraction in turbulent channel flow using boundary adapted wavelets

*J. of Turbulence, 18(4), 352-375*

*arXiv: 1607.04621*

388-D130

Marie Farge, Naoya Okamoto, Kai Schneider  
and Katsunori Yoshimatsu, 2017

Wavelet-based regularization of the Galerkin truncated three-dimensional incompressible Euler equations  
*Bulletin of the American Physical Society 62(14), 528-529*

387-C120

Benjamin Kadoch, Maxime Bassenne, Mahdi Esmaily-Moghadam, Kai Schneider, Marie Farge and Wouter Bos, 2017

Multiscale curvature angles of inertial particles in turbulent flows  
*16th European Turbulence Conference, 21-24 August 2017, Stockholm (Sweden), 29270*

386-C119

Frank Jacobitz, Kai Schneider and Marie Farge, 2017

Scale-dependent helical properties of turbulent stratified shear flows

*16th European Turbulence Conference, 21-24 August 2017, Stockholm (Sweden), 29338*

**2016**

385-D129

Marie Farge, 2016

L'usage purement quantitatif de la bibliométrie est contre-productif pour la recherche

*I2D-Information, Données & Documents*, **4**, 19

384-C118

Thomas Engels, Dmitry Kolomenskiy, Kai Schneider, Marie Farge, Fritz-Olaf Lehmann and Jörn Sesterhenn, 2016

Helical vortices generated by flapping wings of bumblebees

*IUTAM Symposium 2016 on Helicity, Structures and Singularity in Fluids and Plasma Dynamics*

383-D128

Bryan He, Benjamin Kadoch, Sourabh Apte, Marie Farge and Kai Schneider, 2016

Multiscale Lagrangian statistics of curvature angle in pore-scale turbulence

*Bulletin of the American Physical Society* **61**(20), 449

382-R99

Frank Jacobitz, Kai Schneider, Wouter Bos and Marie Farge, 2016

Structure of sheared and rotating turbulence: multiscale statistics of Lagrangian and Eulerian accelerations and passive scalar dynamics

*Phys. Rev. E*, **93**(1), 013113

381-D127

Kai Schneider, Benjamin Kadoch, Maxime Bassenne,

Mahdi Esmaily-Moghadam, Marie Farge, Wouter Bos, 2016

Multiscale geometrical Lagrangian statistics: scale-dependent curvature and torsion angles in particle-laden turbulent flows

*Bulletin of the American Physical Society* **61**(20), 202

380-D126

Marie Farge, 2016

Les revues académiques ne devraient plus appartenir aux maisons d'édition

*I2D-Information, Données & Documents*, **3**, 19

379-C117

Rodrigo Pereira, Romain Nguyen van yen, Kai Schneider and Marie Farge, 2016

Dissipation in adaptive wavelet discretizations

*5th Chilean Workshop on Numerical Analysis of Partial Differential Equations (WONAPDE 2016), January 11-15 2016, Universidad de Concepcion*

378-D125

Marie Farge, 2016

Les chercheurs reprennent le contrôle de la dissémination de leurs oeuvres

*I2D-Information, Données & Documents*, **2**, 19

377-D124

Marie Farge, Thomas Engels, Dmitry Kolomenskiy,  
Kai Schneider, Fritz-Olaf Lehmann and Jörn Sesterhenn, 2016  
Helical vortices generated by flapping wings of bumblebees  
*Bulletin of the American Physical Society* **61**(20), 248

376-R98

Seung-Bu Park, Pierre Gentine, Kai Schneider and Marie Farge, 2016  
Coherent structures in the boundary and cloud layers: Role of updrafts,  
subsiding shells, and environmental subsidence  
*J. Atmospheric Science*, **73**(4), 1789-1814

375-D123

Marie Farge and Kai Schneider, 2016  
Applications of continuous and orthogonal wavelet transforms to  
MHD and plasma turbulence  
*Bulletin of the American Physical Society*, **61**(18), 42

374-D122

Marie Farge, 2016  
Un article scientifique n'est pas une marchandise mais un bien commun  
*I2D-Information, Données & Documents*, **1**, 19

## 2015

373-C116

Seung-Bu Park, Pierre Gentine, Kai Schneider and Marie Farge, 2015  
Detecting coherent structures in large-eddy simulation of shallow convection  
*American Geophysical Union (AGU) Fall Meeting, 14-18 December 2015, San Francisco (USA)*

372-D121

Marie Farge, Teluo Sakurai, Katsunori Yoshimatsu, Kai Schneider,  
Koji Morishita and Takashi Ishihara, 2015  
Isotropic boundary-adapted wavelets for coherent vorticity extraction in  
turbulent channel flows  
*Bull. Amer. Phys. Soc.*, **60**(21), 602

371-R97

Marie Farge and Kai Schneider, 2015  
Wavelet transforms and their applications to MHD and plasma turbulence:  
a review  
*J. Plasma Phys.*, **81**(6), 435810602 (43 pages)  
*arXiv: 1508.05650*

370-C115

Frank Jacobitz, Kai Schneider and Marie Farge, 2015  
Multiscale statistics of Lagrangian and Eulerian acceleration in turbulent  
stratified shear flows

*15th European Turbulence Conference, 25-28 August 2015,  
Delft (Netherlands)*

369-D120

Frank Jacobitz, Kai Schneider and Marie Farge, 2015

Lagrangian and Eulerian time-rate of change statistics of fluctuating vorticity in turbulent stratified shear flows

*Bull. Amer. Phys. Soc.*, **60**(21), 275-276

368-C114

Frank Jacobitz, Kai Schneider and Marie Farge, 2015

On acceleration statistics in turbulent stratified shear

*Flows 9th International Symposium on Turbulence and Shear Flow Phenomena (TSFP-9), June 30th-July 3rd 2015, University of Melbourne (Australia), 3C-4*

367-D119

Romain Nguyen van yen, Mathias Waidmann, Rupert Klein and Marie Farge, 2015

Interaction of two-dimensional incompressible flow with solid boundaries at vanishing viscosity: boundary layer scaling and detachment

*Preprint, Mathematics Department, Freie Universität Berlin (Germany)*

366-C113

Katsunori Yoshimatsu, Teluo Sakurai, Kai Schneider, Marie Farge, Koji Morishita and Takashi Ishihara, 2015

Coherent vorticity in turbulent channel flow: a wavelet viewpoint

*9th International Symposium on Turbulence and Shear Flow Phenomena (TSFP-9), June 30-July 3rd 2015, University of Melbourne (Australia), 4B-5*

**2014**

365-C112

Romain Nguyen van yen, Mathias Waidmann, Marie Farge, Kai Schneider and Rupert Klein, 2014

Production of dissipative vortices by solid bodies in incompressible fluid flows: comparison between Prandtl, Navier-Stokes and Euler solutions

*International Congress of Mathematicians, Seoul (Korea), 412*

364-R96

Kai Schneider, Mickael Paget-Goy, Alberto Verga and Marie Farge, 2014

Numerical simulation of impulsively started and uniformly accelerated plates  
*Computational and Applied Mathematics*, **33**(2), 481-495

363-C111

Katsunori Yoshimatsu, Teluo Sakurai, Kai Schneider, Marie Farge, Koji Morishita and Takashi Ishihara, 2014

Coherent vorticity extraction in turbulent channel flow using anisotropic wavelets

*67th Annual Conference, Division of Fluid Dynamics, American Physical*



*Society, 23-25 November 2014, San Fransisco (USA),  
Bull. Amer. Phys. Soc., 59(20), 400*

362-O40

Marie Farge, Keith Moffatt and Kai Schneider, 2014  
Fundamental problems of turbulence : 50 years after the Turbulence  
Colloquium Marseille of 1961  
*EDP Sciences, 508 pages, ISBN 978-2-7598-1145-8*

361-C110

Romain Nguyen van yen, Marie Farge, Mathias Waidmann,  
Rupert Klein and Kai Schneider, 2014  
Unsteady boundary layer detachment in planar flows at large  
Reynolds number  
*67th Annual Conference, Division of Fluid Dynamics, American  
Physical Society, 23-25 November 2014, San Francisco (USA),  
Bull. Amer. Phys. Soc., 59(20), 264*

360-R95

Naoya Okamoto, Katsunori Yoshimatsu, Kai Schneider  
and Marie Farge, 2014  
Small-scale anisotropic intermittency in magnetohydrodynamic  
turbulence at low magnetic Reynolds number  
*Phys. Rev. E, 89, 033013*

359-C109

Frank Jacobitz, Kai Schneider and Marie Farge, 2014  
Lagrangian and Eulerian Acceleration Statistics in Turbulent  
Stratified Shear Flows,  
*67th Annual Conference, Division of Fluid Dynamics, American  
Physical Society, 23-25 November 2014, San Francisco (USA),  
Bull. Amer. Phys. Soc., 59(20), 72*

358-R94

Olivier Pannekoucke, Laure Raynaud and Marie Farge, 2014  
A wavelet-based filtering of ensemble background-error variances  
*Quaterly J. Royal Meteo. Soc., 140(678), 316-327*

**2013**

357-R93

Marie Farge, Keith Moffatt and Kai Schneider, 2013  
Foreword: Turbulence Colloquium Marseille 2011  
*J. of Turbulence, 14(9), 39-42*

356-C108

Romain Nguyen van yen, Mathias Waidmann, Marie Farge,  
Kai Schneider and Rupert Klein, 2013  
Production of dissipative vortices by solid bodies in

incompressible fluid flows: comparison between Prandtl,  
Navier-Stokes and Euler solutions  
*IUTAM Symposium on Vortex Dynamics: Formation, Structure  
and Function, March 10-14, 2013, Fukuoka (Japan)*

355-R92

Rodrigo Pereira, Romain Nguyen van yen, Marie Farge  
and Kai Schneider, 2013

Wavelet methods for regularizing the inviscid Burgers and the 2D  
Euler equations

*Phys. Rev. E*, **87**, 033017, 1-8

*arXiv: 1303.0980*

354-D118

Kai Schneider, Rodrigo Pereira and Marie Farge, 2013

Eliminating resonances in the Galerkin-truncated Burgers and  
Euler equations using wavelet filtering

*Bull. Amer. Phys. Soc.*, **58**(18), 443-444

353-C107

Marie Farge, Romain Nguyen van yen, Mathias Waidmann  
and Rupert Klein, 2013

Comparison between Prandtl, Navier-Stokes and Euler solutions  
for 2D flows in the presence of solid boundaries

*Annual Conference of the American Physical Society, Division of  
Fluid Dynamics, Pittsburgh, 24-26th November 2013,*

*Bull. Amer. Phys. Soc.*, **58**(16), 384

352-D117

Tim Gowers, ... Farge et al. (with 23 co-authors), 2013

The Elsevier boycott one year on

<http://gowers.wordpress.com>

351-C106

Frank Jacobitz, Kai Schneider, Wouter Bos and Marie Farge, 2013  
On Lagrangian and Eulerian Acceleration in Rotating and Sheared  
Homogeneous Turbulence

*Annual Conference of the American Physical Society, Division of  
Fluid Dynamics, Pittsburgh, 24-26th November 2013,*

*Bull. Amer. Phys. Soc.*, **58**(18), 65

350-D116

Marie Farge, Mathias Waidmann, Kai Schneider  
and Rupert Klein, 2013

Comparison between Prandtl, Navier-Stokes and Euler solutions  
for 2D flows in the presence of solid boundaries

*Bull. Amer. Phys. Soc.*, **58**(18), 197

349-C105

Naoya Okamoto, Katsunori Yoshimatsu, Kai Schneider

and Marie Farge, 2013  
Directional multi-scale statistics of quasi-static  
magnetohydrodynamic turbulence  
*Annual Conference of the American Physical Society, Division of  
Plasma Physics, Denver, 11-13th November 2013, 112*

348-D115  
Odin Mendes, Kai Schneider, Margarete Domingues, Marie Farge,  
Nalin Babulal Trivedi, Peter Frick and Romain Nguyen van yen, 2013  
Extraction of coherent geomagnetic structures in a GIC event using wavelets  
*Preprint LMD-ENS-IPSL*

347-C104  
Frank Jacobitz, Kai Schneider, Wouter Bos and Marie Farge, 2013  
On multiscale accélération statistics in rotating and sheared  
homogeneous turbulence  
*8th International Symposium on Turbulence and Shear Flow  
Phenomena, 28-30 August 2013, Poitiers (France)*

346-D114  
George Khujadze, Romain Nguyen van yen, Kai Schneider,  
Martin Oberlack and Marie Farge, 2013  
Coherent vorticity extraction in turbulent boundary layers using  
orthogonal wavelets  
*Preprint LMD-IPSL*

345-C103  
Kai Schneider, Rodrigo Pereira, Romain Nguyen van yen  
and Marie Farge, 2013  
Eliminating resonances in the Galerkin-truncated Burgers and  
Euler equations using wavelet filtering  
*Annual Conference of the American Physical Society, Division of  
Fluid Dynamics, 24-26th November 2013, Pittsburgh (USA),  
Bull. Amer. Phys. Soc., 58(18), 443-444*

344-C102  
Romain Nguyen van yen, Mathias Waidmann, Marie Farge,  
Kai Schneider and Rupert Klein, 2013  
Comparison between Prandtl, Navier–Stokes and Euler solutions  
for dipole impinging on a wall  
*14th European Turbulence Conference, 1-4 September 2013,  
Lyon (France)*

343-R91  
Katsunori Yoshimatsu, Naoya Okamoto, Yasuhiro Kawahara,  
Kai Schneider and Marie Farge, 2013  
Coherent vorticity and current density simulation of three-dimensional  
magnetohydrodynamic turbulence using orthogonal wavelets  
*Geo. Astro. Fluid Dyn., 107(1-2), 73-92*

342-C101

F. Jacobitz, K. Schneider, W.J.T. Bos and M. Farge, 2013  
Scale-dependent statistics of Lagrangian and Eulerian acceleration  
in rotating and sheared homogeneous turbulence  
*14th European Turbulence Conference, 1-4 September 2013, Lyon  
(France)*

341-O39

Marie Farge, Romain Nguyen van yen, Olivier Pannekoucke  
and Kai Schneider, 2013  
Multiscale representations: fractals, random processes and wavelets  
*Handbook of Environmental Fluid Dynamics, ed. H.J. Fernando,  
Taylor & Francis, vol. 2, 311-332*

340-C100

Kai Schneider, Dmitry Kolomenskiy, Thomas Engels,  
Keith Moffatt, and Marie Farge, 2013  
Numerical simulation of the clap-fling-sweep mechanism of  
hovering insects  
*Adv. Scien. Techn., 84, 57-58*

## 2012

339-C99

Dmitry Kolomenskiy, Keith Moffatt, Marie Farge  
and Kai Schneider, 2012  
Fluid dynamics of flapping wings associated with change of  
domain topology  
*IUTAM Symposium on Topological Fluid Dynamics, Cambridge  
(UK)*

338-D113

Douglas Aaronson, ... Farge et al. (avec 33 co-auteurs), 2012  
Le coût du savoir  
*Gazette des Mathématiciens, n° 132, 75-82*

337-D112

Kai Schneider, Romain Nguyen van yen, Nicolas Fedorczak,  
Frederic Brochard, Gérard Bonhomme, Marie Farge  
and Pascale Monier-Garbet, 2012  
Tomographic reconstruction of tokamak plasma light emission  
using wavelet-vaguelette decomposition,  
*Bull. Amer. Phys. Soc., 57(12), 304*

336-D111

Dmitry Kolomenskiy, Keith Moffatt, Marie Farge  
and Kai Schneider, 2012  
Unsteady flow near front and rear stagnation points  
*Bull. Amer. Phys. Soc., 57 (17), 469*

335-C98

Frank Jacobitz, Kai Schneider, Wouter Bos and Marie Farge, 2012  
On helical multiscale characterization of homogeneous turbulence  
*IUTAM Symposium on Topological Fluid Dynamics, Cambridge (UK)*

334-D110

Marie Farge, Romain Nguyen van yen and Kai Schneider, 2012  
Nonstationary boundary layers and energy dissipation in  
incompressible flows  
*Bull. Amer. Phys. Soc.*, **57** (17), 453

333-D109

Wouter Bos, Frank Jacobitz, Kai Schneider and Marie Farge, 2012  
On Helical Multiscale Characterization of Homogeneous  
Turbulence  
*Bull. Amer. Phys. Soc.*, **57** (17), 399

332-D108

Frank Jacobitz, Kai Schneider, Wouter Bos and Marie Farge, 2012  
Acceleration Statistics in Rotating and Sheared Turbulence  
*Bull. Amer. Phys. Soc.*, **57** (17), 457

331-R90

Frank Jacobitz, Kai Schneider, Wouter Bos and Marie Farge, 2012  
On helical multiscale characterization of homogeneous turbulence  
*J. Turbulence*, **13**, n° 35, 1-16

330-C97

Dmitry Kolomenskiy, Keith Moffatt, Marie Farge  
and Kai Schneider, 2012  
Unsteady boundary layers on flapping wings  
*23rd ICTAM, Beijing (China)*

329-D107

Romain Nguyen van yen, Eric Sonnendrücker, Kai Schneider  
and Marie Farge, 2012  
Particle-in-Wavelets scheme for the 1D Vlasov-Poisson equations  
*Bull. Amer. Phys. Soc.*, **57**(12), 354

328-D106

Douglas Aaronson, ... Farge et al. (with 33 co-authors), 2012  
The cost of knowledge  
<http://thecostofknowledge.com>

327-R89

Michael Wilczek, Benjamin Kadoch, Kai Schneider, Rudolf Friedrich  
and Marie Farge, 2012  
Conditional vorticity budget of coherent and incoherent flow contributions in

fully developed homogeneous isotropic turbulence  
*Phys. Fluids*, **24**, 035108, 1-15  
*arXiv: 1203.4496*

326-C96

Katsunori Yoshimatsu, Naoya Okamoto, Yoshi Kawahara, Kai Schneider and Marie Farge, 2012  
Coherent vorticity and current density simulation of magnetohydrodynamic turbulence  
*31<sup>st</sup> JSST International Conference on Simulation Technology, Kobe (Japan)*,  
[http://www.jsst.jp/e/JSST2012/paper\\_list.html](http://www.jsst.jp/e/JSST2012/paper_list.html)

325-D106

Marie Farge, Alex Grossmann, Yves Meyer, Thierry Paul, Jean-Claude Risset, Ginette Saracco et Bruno Torr sani, 2012  
Les ondelettes et le CIRM  
*Gazette des Math maticiens, Soci t  Math matique de France (SMF)*, **131**, 47-57

324-R88

Romain Nguyen van yen, Nicolas Fedorczak, Fr d ric Brochard, Kai Schneider, Marie Farge and Pascale Monier-Garbet, 2012  
Tomographic reconstruction of tokamak edge turbulence light emission from single image using wavelet-vaguelette decomposition  
*Nuclear Fusion, IAEA (International Atomic Energy Agency)*, **52**, 013005, 1-11

323-D105

Katsunori Yoshimatsu, Naoya Okamoto, Yasuhiro Kawahara, Kai Schneider and Marie Farge, 2012  
Coherent vorticity and current density simulation of three-dimensional magnetohydrodynamic turbulence using orthogonal wavelets  
*Bull. Amer. Phys. Soc.*, **57**(17), 433

322-C95

Naoya Okamoto, Katsunori Yoshimatsu, Kai Schneider, Marie Farge and Yukio Kaneda, 2012  
Coherent vorticity simulation of three-dimensional forced homogeneous isotropic turbulence using orthogonal wavelets  
*ECCOMAS 2012, Vienna (Austria)*

321-R87

Romain Nguyen van yen, Marie Farge and Kai Schneider, 2012  
Scale-wise coherent vorticity extraction for conditional statistical modelling of homogeneous isotropic two-dimensional turbulence  
*Physica D*, **241**, 186-201

## 2011

320-R86

Dmitry Kolomenskiy, Keith Moffatt, Marie Farge  
and Kai Schneider, 2011

Two- and three-dimensional numerical simulations of the clap-fling-sweep of  
hovering insects

*J. Fluids Struct.*, **27**, 784-791

319-C94

George Khujadze, Romain Nguyen van yen, Kai Schneider,  
Martin Oberlack and Marie Farge, 2011

Coherent vorticity extraction in turbulent boundary layers using  
orthogonal wavelets

*Turbulent Boundary Layers, Center for Turbulence Research, Summer  
Program 2010, Stanford University and NASA-Ames*, 87-96

318-D104

Marie Farge, 2011

Avis sur les relations entre les chercheurs  
et les maisons d'édition scientifique

*Comité d'Ethique du CNRS, COMETS-CNRS, 27 Juin 2011*, 1-28

317-R85

Katsunori Yoshimatsu, Kai Schneider, Naoya Okamoto,  
Yasuhiro Kawahara and Marie Farge, 2011

Intermittency and geometrical statistics of three-dimensional homogeneous  
magnetohydrodynamic turbulence : a wavelet viewpoint

*Phys. Plasmas*, **18**, 092304, 1-8

316-D103

Frank Jacobitz, Kai Schneider, Wouter Bos and Marie Farge, 2011

Helicity and super-helicity in homogeneous turbulent shear flow

*Bull. Amer. Phys. Soc.*, **56**(16), 325

315-C93

Michael Wilczek, Benjamin Kadoch, Kai Schneider, Rudolf  
Friedrich

and Marie Farge, 2011

Wavelet analysis of the conditional vorticity budget in fully-  
developed homogeneous isotropic turbulence

*J. Phys. Conf. Ser.*, **318**, 062024, 1-8

314-R84

Romain Nguyen van yen, Benjamin Kadoch, Vivek Kumar, Benjamin  
Ménétrier, Marie Farge, Kai Schneider, Diane Douady and Lionel Guez, 2011

Influence of waves on Lagrangian acceleration in 2D turbulent flows

*ESAIM Proc.*, **32**, 231-241

313-C92

Frank G. Jacobitz, Kai Schneider, Wouter J.T. Bos and Marie Farge, 2011  
On helical properties of homogeneous turbulence  
*Seventh International Symposium on Turbulence and Shear Flow Phenomena, Ottawa (Canada)*

312-O38

Marie Farge, 2011

Oh! Une idée, c'est si rare!

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