

## Journal Publications

1. W. Bos, H. Touil, L. Shao, J.-P. Bertoglio  
On the behaviour of the velocity-scalar cross correlation spectrum in the inertial range,  
*Phys. Fluids* **16**, 3818, 2004
2. W. Bos, H. Touil, J.-P. Bertoglio  
Reynolds number dependency of the scalar flux spectrum in isotropic turbulence with a uniform scalar gradient,  
*Phys. Fluids* **17**, 125108, 2005
3. W. Bos, J.-P. Bertoglio  
A single-time two-point closure based on fluid particle displacements,  
*Phys. Fluids*, **18**, 031706, 2006
4. W. Bos, J.-P. Bertoglio  
Spectral dynamics of inviscid isotropic turbulence in a truncated domain,  
*Phys. Fluids*, **18**, 071701, 2006
5. G. Lamaison, W. Bos, L. Shao, J.-P. Bertoglio  
Decay of scalar variance in isotropic turbulence in a bounded domain,  
*J. Turbulence*, **8**, 4, 2007
6. W. Bos, L. Shao, J.-P. Bertoglio  
Spectral imbalance and the normalized dissipation rate of turbulence,  
*Phys. Fluids*, **19**, 045101, 2007
7. W. Bos, J.-P. Bertoglio  
Inertial range scaling of scalar flux spectra in uniformly sheared turbulence,  
*Phys. Fluids* **19**, 025104, 2007
8. W. Bos, T. Clark, R. Rubinstein  
Small-scale response and modeling of periodically forced turbulence,  
*Phys. Fluids* **19**, 055107, 2007
9. W. Bos, L. Liechtenstein, K.Schneider  
Small-scale intermittency in anisotropic turbulence ,  
*Phys. Rev. E* **76**, 046310 (2007)
10. B. Kadoch, W. Bos, K.Schneider  
Extreme Lagrangian acceleration in confined turbulent flow,  
*Phys. Rev. Lett.* **100**, 184503 (2008)
11. W. Bos, S. Futatani, S. Benkadda, M. Farge, K. Schneider  
Role of coherent vorticity in turbulent transport in edge tokamak, plasma  
*Phys. Plasmas* **15** (2008)
12. S. Neffaa, W. Bos, K. Schneider  
The decay of magnetohydrodynamic turbulence in a confined domain  
*Phys. Plasmas* **15** (2008)

Publications submitted or in preparation

13. Rapid generation of angular momentum in bounded magnetized plasma. W. Bos, S. Neffaa, K. Schneider.
14. Large-scale bottleneck effect in two-dimensional turbulence. W. Bos, J.-P. Bertoglio

### Conferences with proceedings

- cp1. W. Bos, H. Touil, L. Shao, J.-P. Bertoglio, Two-point modelling of turbulent scalar mixing and a new inertial range law, *Turbulence, Heat and Mass Transfer* 4, Octobre 2003, Antalya, Turkey
- cp2. W. Bos, H. Touil, L. Shao, J.-P. Bertoglio, Spectral studies of scalar mixing, *Eur. Turb. conf.* 10, Juin 2004, Trondheim, Norway
- cp3. W. Bos, H. Touil, J.-P. Bertoglio, Closure study of the Reynolds number dependency of the scalar flux spectrum, *Turb. Shear Flow Phen.*, Juin 2005, Williamsburg, USA
- cp4. W. Bos, H. Touil, L. Shao, J.-P. Bertoglio, Etude de l'effet du nombre de Reynolds sur le spectre du flux de scalaire, *CFM*, Septembre 2005, Troyes.
- cp5. W. Bos, J.-P. Bertoglio, Application of a two-point closure to the dispersion of particles in isotropic and sheared turbulence, *Progress in Turbulence 2. Proceedings of the iTi Conference in Turbulence*, Bad Zwischenahn, Germany, 2005, Springer Proceedings in Physics , Vol. 109
- cp6. L. Liechtenstein, W. Bos, K. Schneider, Quantifying anisotropy in stratified and rotating turbulence using orthogonal wavelets, *Eur. Turb. Conf. 11*, Juin 2007, Porto, Portugal.
- cp7. R. Rubinstein and W. Bos, The modulated dissipation rate in periodically forced turbulence, *Eur. Turb. Conf. 11*, Juin 2007, Porto, Portugal.
- cp8. W. Bos, L. Shao, J.-P. Bertoglio The effect of a finite cascade time on the normalized energy dissipation, *Eur. Turb. Conf. 11*, Juin 2007, Porto, Portugal.

### Conferences without proceedings

- c1. W. Bos, H. Touil, L. Shao, J.-P. Bertoglio, On the velocity-scalar cross correlation spectrum, *Congres Jean-Mathieu*, Juin 2004, Lyon.
- c2. W. Bos, J.-P. Bertoglio, Dynamique non visqueuse du spectre d'énergie cinétique dans un domaine spectral tronqué, *GDR Turbulence*, Avril 2005, Lyon.
- c3. W. Bos, J.-P. Bertoglio, Dispersion de particules en turbulence avec ou sans cisaillement, *GDR Turbulence*, Novembre 2005, Nantes
- c4. W. Bos, J.-P. Bertoglio, A single-time two-point closure based on particle displacements in a scalar field, *NIA/ERCOTAC workshop on 'Spectral theories of turbulence and their applications*, Juillet 2005, Williamsburg, USA
- c5. W. Bos, J.-P. Bertoglio, A two-point closure based on a Lagrangian timescale, *Eur. Fluid Mech. Conf. 6*, Juin 2006, Stockholm, Suède.
- c6. W. Bos, R. Rubinstein, Forçage périodique de la turbulence et réponse des petites échelles, *GDR Turbulence et Dynamo*, Novembre 2006, Nice.
- c7. W. Bos, On the universality of the normalized dissipation rate, *Workshop 3D structure and Lagrangian aspects in turbulence for fluids and plasmas*, Novembre 2006, Luminy.
- c8. R. Rubinstein , W. Bos , T. Clark, Small scale response in periodically forced turbulence, *APS DFD meeting*, Novembre 2006, Tampa Bay, USA
- c9. W. Bos, L. Shao, J.-P. Bertoglio, Déséquilibre spectral et la dissipation normalisée en turbulence, *GDR Turbulence*, Mai 2007, Marseille
- c10. W. Bos, S. Futatani, S. Benkadda, M. Farge, K. Schneider, Role of coherent vorticity in turbulent transport in edge tokamak, plasma, *APS DPP meeting*, Novembre 2007, Orlando, USA
- c11. W. Bos, B. Kadoch, K. Schneider, J.-P. Bertoglio, Scaling of the velocity-scalar cross-correlation spectrum in two-dimensional turbulence, *APS DFD meeting*, Novembre 2007, Salt Lake City, USA
- c12. W. Bos, B. Kadoch, K. Schneider, Extreme lagrangian acceleration in confined turbulence, *Réunion centre Henri Bénard*, Janvier 2008, Lyon
- c13. W. Bos, Studies of two-dimensional turbulence, *workshop Conceptual aspects in turbulence*, Février 2008, Vienna, Austria

- c14. W. Bos, F. Raynal, Lagrangian acceleration in time periodic laminar flow, GDR Turbulence, Mars 2008, Lyon.
- c15. W. Bos, S. Neffaa, K. Schneider. The decay of magnetohydrodynamic turbulence in a confined domain. Méthodes multi-échelles pour la turbulence plasma et fluide. Avril 2008, Luminy.
- c16. W. Bos, L. Shao, J.-P. Bertoglio, Déséquilibre spectral et la dissipation normalisée en turbulence, GDR Turbulence, Mai 2008, Île d'Oléron.
- c17 K. Schneider, S. Neffaa, W. Bos, The decay of MHD turbulence in a bounded domain , APS DPP meeting, Novembre 2008, Dallas, USA.
- c18 W. Bos, S. Neffaa, K. Schneider. Rapid Spin-Up of MHD Turbulence, Novembre 2008, Dallas, USA.
- c19 M. Farge, W. Bos, S. Futatani, S. Benkadda, K. Schneider. Coherent vortex extraction in drift wave turbulence using orthogonal wavelets, APS DPP meeting, Novembre 2008, Dallas, USA.
- c20 W. Bos, S. Neffaa, K. Schneider. Rapid Spin-Up of MHD Turbulence, APS DFD meeting, Novembre 2008, San Antonio, USA.

### **Séminaires Invités**

- S1. Coria, Rouen, 27 avril 2006
- S2. MSNM-GP, Marseille, 8 juin 2006
- S3. University of Liverpool, 4 Octobre, 2006
- S4. University of Cambridge, 6 Octobre, 2006
- S5. University of Warwick, Novembre, 2008