

## LISTE DES PUBLICATIONS

Jean-François PINTON  
 CNRS, Directeur de Recherche  
 Laboratoire de Physique de l'École Normale Supérieure de Lyon

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## BREVETS

- ◇ 2010: Velocimètre pour les fluides conducteurs #FR1054250,
- ◇ 2008: Particules instrumentées, #FR0800682 (+ extension EU)

## ARTICLES

**2011**

- 108● E. Calzavarini, R. Volk, E. Lévêque, F. Toschi and J.-F. Pinton, Impact of trailing wake drag on the statistics of finite-size particles in turbulence, to appear in *Physica D* (2011)
- 107● J. Stehlé, N. Voirin, A. Barrat, C. Cattuto, L. Isella, J.-F. Pinton, M. Quaggiotto, W. Van den Broeck, C. Rgis, B. Lina and Ph. Vanhems, High-resolution measurements of face-to-face proximity patterns in a primary school and public health implications, to appear in *PLoS One* (2011)
- 106● J.-F. Pinton, Laboratory dynamos, *Rapport du Comité National Français de Géodésie et Géophysique* (2011)
- 105● J. Stehlé, A. Barrat, C. Cattuto, V. Colizza, L. Isella, J.-F. Pinton, W. van der Broeck, P. Vanhems, N. Voirin, Simulation of an SEIR infectious disease model on the dynamic contact network of conference attendees, *BMC Medicine* **9**, 87 (2011) doi:10.1186/1741-7015-9-87
- 104● R. Zimmermann, Y. Gasteuil, M. Bourgoïn, R. Volk, A. Pumir, J.-F. Pinton, Rotational intermittency and turbulence induced lift experienced by large particles in a turbulent flow, *Phys. Rev. Lett.* **106**, 154501 (2011)
- 103● R. Zimmermann, Y. Gasteuil, M. Bourgoïn, R. Volk, A. Pumir, J.-F. Pinton, Tracking the dynamics of translation and absolute orientation of a sphere in a turbulent flow, *Rev. Sci. Instr.* **82**, 033906 (2011)
- 102● R. Volk, E. Calzavarini, E. Lévêque, J.-F. Pinton, Dynamics of inertial range particles in a turbulent flow, *J. Fluid. Mech.* **668**, 223-235 (2011)
- 101● L. Isella, J. Stehlé, A. Barrat, C. Cattuto, J.-F. Pinton, M. Quaggiotto, W. van den Broeck; What's in a crowd? Analysis of face-to-face interaction networks / patterns, *J. Theo. Bio.* **271** 166 (2011)

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- 100● R. Benzi, J.-F. Pinton, Magnetic reversals in a simple model of MHD, *Phys. Rev. Lett.* **105**, 024501 (2010)
- 99● C. Cattuto, W. Van den Broeck, A. Barrat, V. Colizza, J.-F. Pinton, A. Vespignani, Dynamics of person-to-person interactions from distributed RFID sensor networks , *PLoS One*, **5**(7), e11596 (2010)

- 98• M. Berhanu, G. Verhille, J. Boisson, B. Gallet, C. Gissinger, S. Fauve, N. Mordant, F. Pétrélis, M. Bourgoïn, Ph. Odier, J.-F. Pinton, N. Plihon, S. Aumaître, A. Chiffaudel, F. Daviaud, B. Dubrulle, and C. Pirat: Dynamo regimes and transitions in the VKS experiment, *Euro. Phys. J. B* **77**, 459–468 (2010).
- 97• R. Zimmermann, H. Xu, Y. Gasteuil, M. Bourgoïn, R. Volk, J.-F. Pinton, E. Bodenschatz, The Lagrangian Exploration Module: An Apparatus for the Study of Statistically Homogeneous and Isotropic Turbulence, *Rev. Sci. Instruments* **81**, 055112 (2010)
- 96• Denisov S., Dolgikh V., Kolesnichenko I., Khalilov R., Khripchenko S., Verhille G., Plihon N., Pinton J.-F., Flow of liquid metal in a cylindrical crystallizer generating two-dimensional MHD stirring, *Magnetohydrodynamics* **46**(1), 69–78 (2010)
- 95• G. Verhille, N. Plihon, M. Bourgoïn, Ph. Odier, J.-F. Pinton, Induction in a von Kármán flow driven by ferromagnetic impellers, *New J. Phys.* **12**, 033006 (2010)
- 94• G. Verhille, N. Plihon, G. Fanjat, R. Volk, M. Bourgoïn and J.-F. Pinton: Large-scale fluctuations and dynamics of the Bullardvon Kármán dynamo, *Geophys. Astrophys. Fluid Dyn.*, **104**, 189–205 (2010)
- 93• G. Verhille, N. Plihon, M. Bourgoïn, N. Plihon, Ph. Odier, R. Volk, J.-F. Pinton, Laboratory dynamo experiments, *Space Sci. Rev.*, **152**(1), 543 (2010)

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- 91• M. Berhanu, R. Monchaux, M. Bourgoïn, Ph. Odier, J.-F. Pinton, N. Plihon, R. Volk, S. Fauve, N. Mordant, F. Pétrélis, S. Aumaître, A. Chiffaudel, F. Daviaud, B. Dubrulle, F. Ravelet, Bistability between a stationary and an oscillatory dynamo in a turbulent flow of liquid sodium, *J. Fluid. Mech.* **641**, 217-226, (2009)
- 90• G. Verhille, N. Plihon, J.-F. Pinton, V. Noskov, R. Stepanov, P. Frick, Velocity measurement in a spin-down flow inside a torus, *Phys. Fluids* **21**, 045109 (2009)
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- 87• M. Rast and J.-F. Pinton, Point-vortex model for Lagrangian intermittency in turbulence, *Phys. Rev. E* **79**, 046314 (2009)
- 86• A. Barrat, C. Cattuto, V. Colizza, J.-F. Pinton, W. van den Broeck, A. Vespignani, Mining social interactions with active RFID, *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering (LNICST)*, Springer, (2009)
- 85• R. Monchaux, M. Berhanu, S. Aumaître, A. Chiffaudel, F. Daviaud, B. Dubrulle, L. Marié, F. Ravelet, S. Fauve, N. Mordant, F. Pétrélis, M. Bourgoïn, P. Odier, J.-F. Pinton, N. Plihon, R. Volk, The VKS experiment: turbulent dynamical dynamos, *Phys. Fluids* **21**, 035108 (2009)

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- 80• M. Bourgoin, R. Volk, N. Plihon, P. Augier, J.-F. Pinton: A synthetic turbulent dynamo, *New J. Phys.* 10th Anniversary Highlights (2008)
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- 77• R. Volk, N. Mordant, G. Verhille, J.-F. Pinton: Measurement of particle and bubble acceleration in turbulence, *Europhys. Lett.* **81**, 34002 (2008)

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- 66• Woodrow L. Shew and Jean-François Pinton, Dynamical model of bubble path instability, *Phys. Rev. Lett.* **97** 144508 (2006)
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